

# Service Manual

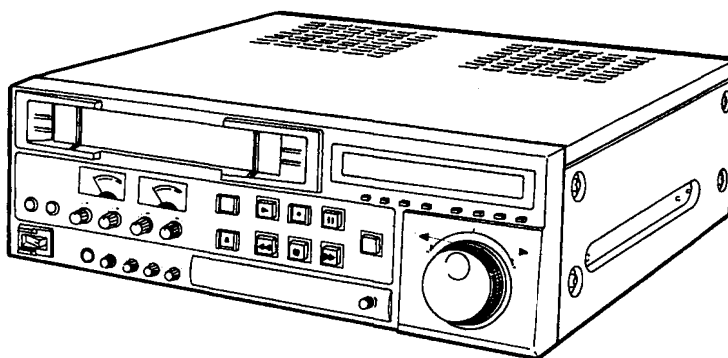
## Volume 1

**Panasonic** **S**VHS **Hi-Fi**

Editing Video Cassette Recorder

**AG-DS850P**

- Sec. 1** *Operating Instructions*
- Sec. 2** *Disassembly Procedures*
- Sec. 3** *Schematic Diagram*
- Sec. 4** *Circuit Board Diagrams*
- Sec. 5** *Exploded Views & Replacement Parts List*



The Mechanism (Sec. 6), Electrical Adjustment (Sec. 7) and Block Diagram (Sec. 8), please refer to the Service Manual Volume 2 (Order No. VSD9404M245).

The detail circuit description for this model, please refer to the Supplement Service Manual (Order No. VSD9404D209).

**Panasonic®**



## SPECIFICATIONS

ITEM			SPECIFICATION			ITEM			SPECIFICATION		
Power	Source	AC 120V ± 10%		Head	Normal Audio/Control: 1 stationary head						
	Consumption	87Watts (with AG-A750)			Hi-Fi Audio: 2 rotary heads 42 μm × 2						
Television Format	EIA Standard (525 lines, 60 fields) NTSC color signal			Erase: 1 full track erase, 1 Audio track erase							
Tape Speed	1-15/16 i.p.s. (33.35mm/s)			Track	2 tracks (Normal Audio stereo) 2 channels (Hi-Fi sound stereo)						
Tape Format	VHS tape, S-VHS tape			Input level	LINE IN Hi-Fi (XLR): + 4/0/− 6dBs, Hi-imp. balanced						
FF/REW	less than 2 min. with 120min. tape				LINE IN NORM/Hi-Fi (XLR): + 4/0/− 6dBs, Hi-imp. balanced						
Video	Head	2 rotary heads, helical scanning system 58 μm(NOR) × 2, 58 μm(SS) × 2 2 flying (rotary) erase heads 56 μm × 2			MICROPHONE IN (1/4" phone × 2): − 50dBv, 4.7kΩ unbalanced						
	Luminance	FM azimuth recording		Output level	LINE OUT Hi-Fi (XLR): + 4/0/− 6dBs, 50Ω output balanced						
	Color signal	Converted subcarrier phase shift recording			LINE OUT NORM/Hi-Fi (XLR): + 4/0/− 6dBs, 50Ω output balanced						
	Input level	VIDEO IN(BNC): 1.0Vp-p 75Ω unbalanced S-VIDEO IN(4P): Y; 1.0Vp-p 75Ω unbalanced C; 0.286Vp-p (burst) 75Ω unbalanced REF IN (BNC): 1.0Vp-p 75Ω unbalanced			HEADPHONE (1/4" phone): − 60dBv to − 20dBv, 8Ω unbalanced						
	Output level	VIDEO OUT (BNC × 2): 1.0Vp-p 75Ω unbalanced S-VIDEO OUT (4P × 2): Y; 1.0Vp-p 75Ω unbalanced C; 0.286Vp-p (burst) 75Ω unbalanced		AUDIO MONITOR OUT (PHONO): 0dBv, 600Ω unbalanced							
		COMPONENT OUT (BNC × 3): Y; 1.0Vp-p 75Ω unbalanced Pr; 0.486Vp-p 75Ω unbalanced Pb; 0.486Vp-p 75Ω unbalanced		Frequency Response	Normal: 50Hz to 12kHz Hi-Fi: 20Hz to 20kHz						
		VIDEO MONITOR OUT (BNC): 1.0Vp-p 75Ω unbalanced		Dynamic Range	Hi-Fi: more than 90dB						
	Signal-to-Noise Ratio	VHS: 46dB (color)		Signal-to-Noise Ratio	48dB (Normal) (with NR switch ON)						
	Horizontal Resolution	S-VHS; more than 400 lines VHS; 240 lines		Time Code	Input level	1.0Vp-p, 10kΩ unbalanced					
	Operating Condition	Temperature	41°F to 104°F (5°C to 40°C)		Output level	2.4Vp-p, low impedance unbalanced					
	Humidity	35% to 80%		Standard Accessories	Power cord VJA0472						
Dimensions	16-11/16" (W) × 5-3/16" (H) × 16-5/16" (D) 424mm(W) × 131.5mm(H) × 415mm(D)			Optional Accessories	S-VIDEO cable (4P) AG-C71 (5m) VW-CV2 (2m) VW-CV1 (1.5m)						
					Editing controller AG-A350 AG-A800 AG-A770 AG-A750 AG-A300 NV-A505 AG-A600 AG-M730E 34P Interface Board AG-IA834 TBC Remote Controller AU-ER65						
Weight	Approx. 12kg (Approx. 26.4lbs.)										

Weight and dimensions shown are approximate.  
Specifications are subject to change without notice.

## INTRODUCTION

This Service Manual contains all the technical information which will allow service personnel to understand and service the Panasonic S-VHS editing video cassette recorder model AG-DS850P.

This model is video cassette recorder for editing applications which was developed for applications in industry, educational establishments, studios and CATV transmissions.

By the use of S-VHS system, a sharp picture quality with high resolution is obtained, and advanced editing by easy operation is realized by the introduction of highly dependable mechanisms.

Just slightly ahead of our time... Panasonic



# CONTENTS

<b>SPECIFICATIONS</b>	<b>1</b>
<b>SAFETY PRECAUTIONS</b>	<b>3</b>
<b>SERVICE INFORMATION</b>	<b>4</b>
<b>SECTION 1 OPERATING INSTRUCTIONS</b>	<b>1-1</b>
Control and Their Function	1-2
Basic Operation	1-5
Switch Setting	1-10
TBC Adjustment	1-11
Editing Operation	1-13
Dial Menu Function	1-17
Time Code	1-23
Connections	1-26
Other	1-29
<b>SECTION 2 DISASSEMBLY PROCEDURES</b>	<b>2-1</b>
1-1. Disassembly Flow Chart	2-2
1-2. Detailed Disassembly Method	2-3
1-3. Screws	2-8
<b>SECTION 3 SCHEMATIC DIAGRAM</b>	<b>SCM-1</b>
<b>SECTION 4 CIRCUIT BOARD DIAGRAMS</b>	<b>CBA-1</b>
<b>SECTION 5 EXPLODED VIEWS &amp; REPLACEMENT PARTS LISTS</b>	<b>PRT-1</b>
Servicing Fixtures & Tools List	PRT-4
Chassis Parts Section	PRT-5
Moving Parts Section	PRT-7
Cassette Compartment Section	PRT-8
Chassis & Frame Section	PRT-10
Casing Parts Section	PRT-11
Packing Parts Section	PRT-13
Electrical Replacement Parts List	PRT-15



# SAFETY PRECAUTIONS

## GENERAL GUIDELINES

1. When servicing observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

## LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwhead connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between  $1\text{M}\Omega$  and  $5.2\text{M}\Omega$ .  
When the exposed metal does not have a return path to the chassis, the reading must be  $\infty$ .

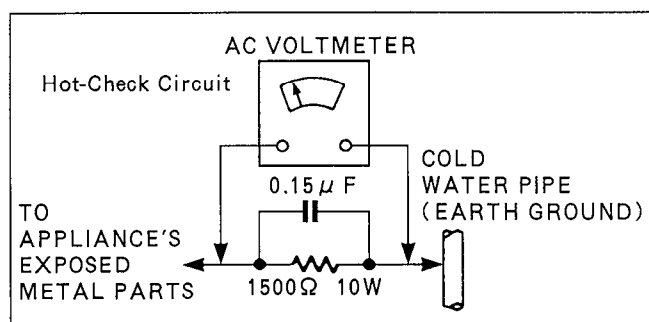


Figure 1

## LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.  
Do not use an isolation transformer for this check.
2. Connect a  $1.5\text{K}\Omega$ ,  $10\text{W}$  resistor, in parallel with  $0.15\mu\text{F}$  capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with  $1000\text{ ohms/volt}$  or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed  $0.75\text{ volts RMS}$ . A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed  $1/2\text{ milliamp}$ . In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

## ELECTROSTATICALLY SENSITIVE(ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

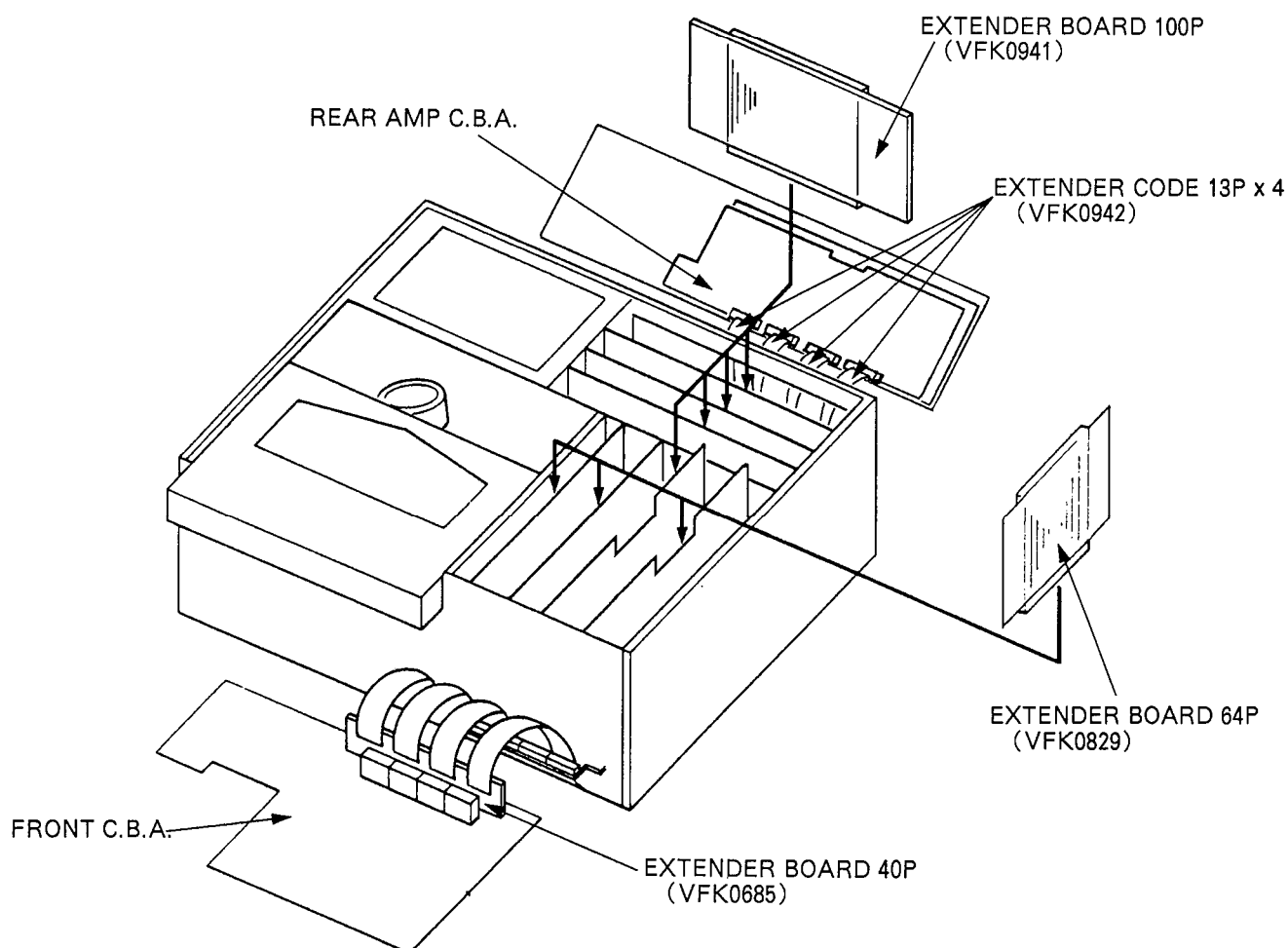
1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.  
Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.  
**CAUTION:** Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).



# SERVICE INFORMATION

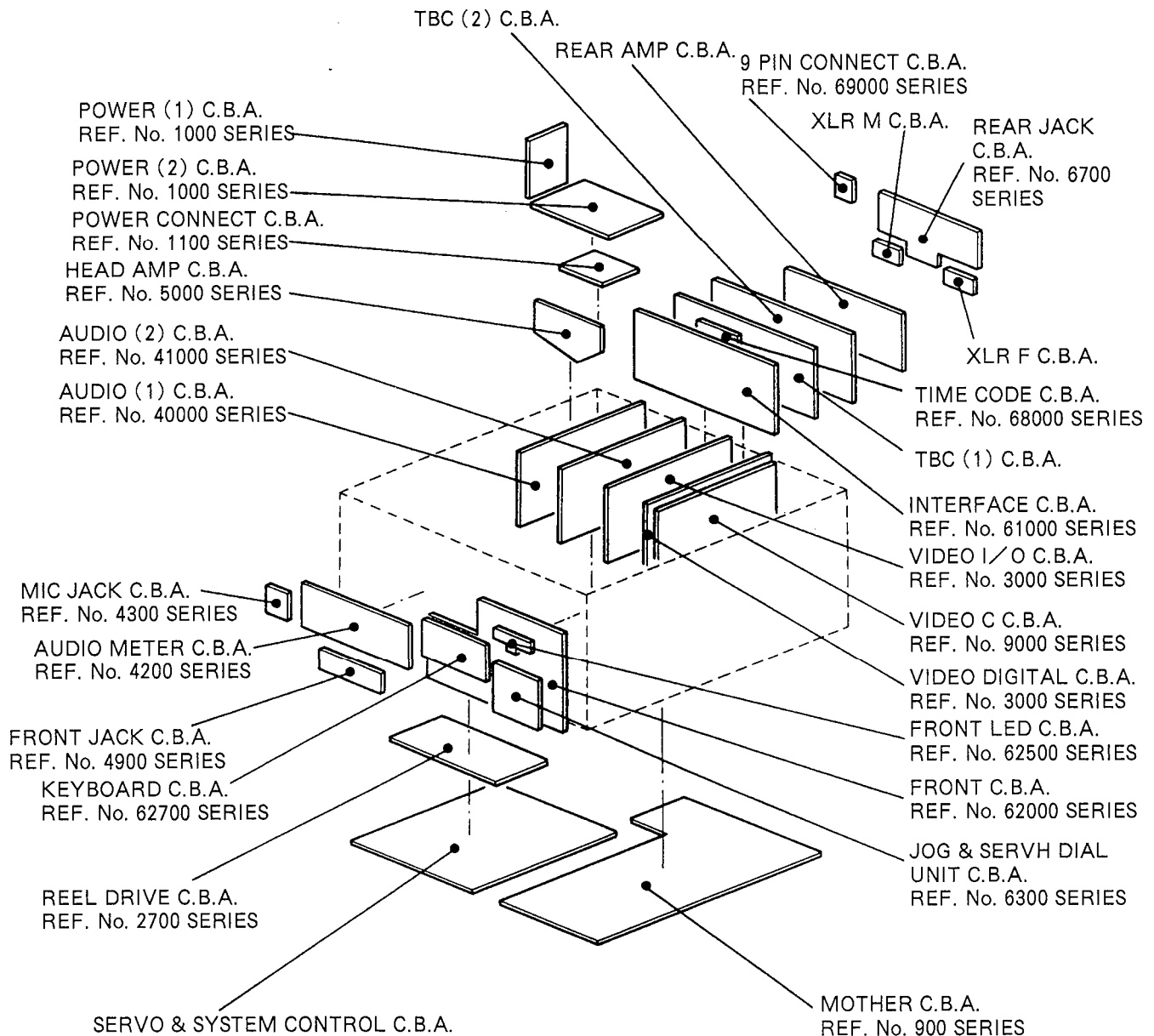
## 1. EXTENDERS

1. EXTENDER BOARD 100P (VFK0941) **NEW**  
FOR INTERFACE, TBC (1), TBC (2) and VIDEO I/O P.C.BOARDs
2. EXTENDER CODE 13P (VFK0942)x 4 **NEW**  
FOR REAR AMP (JACK) P.C.BOARD
3. EXTENDER CODE 40P (VFK0685) SAME AS AG-7350 etc.  
FOR FRONT P.C.BOARD
4. EXTENDER BOARD 64P (VFK0829) SAME AS AG-6760 etc.  
FOR VIDEO DIGITAL, AUDIO (1), AUDIO (2) P.C.BOARDs





## 2. CIRCUIT BOARD LAYOUT



### SERVO & SYSTEM CONTROL C.B.A.

SUB POWER SECTION: REF. No. 1500 SERIES  
 CYL SERVO SECTION: REF. No. 2000 SERIES  
 CAPSTAN SERVO (1) SECTION: REF. No. 2200 SERIES  
 CAPSTAN SERVO (2) SECTION: REF. No. 2200 SERIES  
 CTL AMP SECTION: REF. No. 2300 SERIES  
 WIDE SECTION: REF. No. 2400 SERIES  
 REEL SERVO SECTION: REF. No. 2500 SERIES  
 MOTER DRIVE (1) SECTION: REF. No. 2700 SERIES  
 MOTER DRIVE (2) SECTION: REF. No. 2700 SERIES

### REAR AMP C.B.A.

REAR AMP SECTION: REF. No. 4000 SERIES  
 REAR AMP SECTION: REF. No. 4000 SERIES  
 REAR AMP SECTION: REF. No. 6600 SERIES

### TBC (1) C.B.A.

Y MEMORY (1) SECTION: REF. No. 8000 SERIES  
 Y MEMORY (2) SECTION: REF. No. 8000 SERIES  
 SYNC SEP & AFC SECTION: REF. No. 8100/8300 SERIES  
 CLAMP & AMP SECTION: REF. No. 8200 SERIES  
 C MEMORY SECTION: REF. No. 8300 SERIES  
 TBC & DMS G.A.BLOCK SECTION: REF. No. 8400 SERIES

### TBC (2) C.B.A.

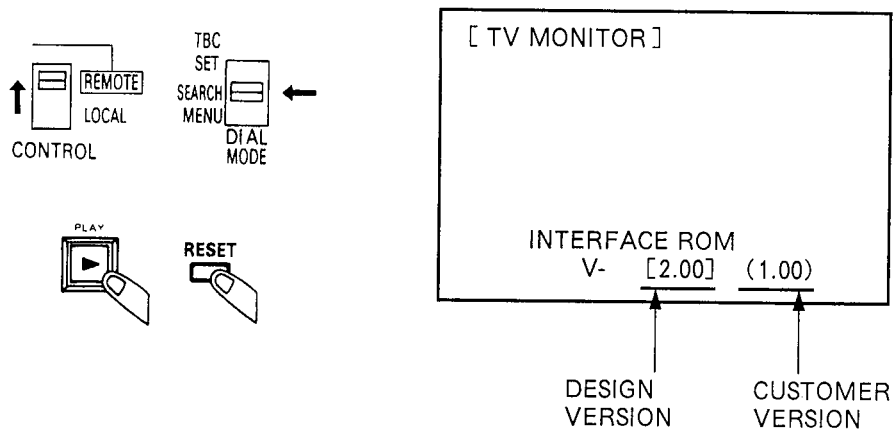
ENCODER SECTION: REF. No. 8000 SERIES  
 SYNC GEN (1) SECTION: REF. No. 8600 SERIES  
 SYNC GEN (2) SECTION: REF. No. 8600 SERIES  
 SYNC GEN (3) SECTION: REF. No. 8700 SERIES  
 TBC2 CONNECTION SECTION: REF. No. 8900 SERIES



### 3. ROM VERSION DISPLAY

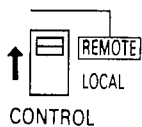
The ROM Version is displayed while the PLAY and RESET buttons are kept depressed as follows;

1. Eject a cassette tape.
2. Set the CONTROL switch to REMOTE.
3. Set the DIAL MODE switch to SEARCH.
4. Push the PLAY button together with RESET button.



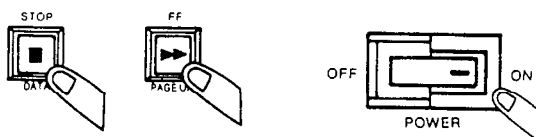
### 4. HOUR METER RESET

1. Turn off the Power.
2. Connect a jumper wire between TP1 and TP2 on the INTERFACE C.B.A.
3. Set the CONTROL switch to REMOTE.



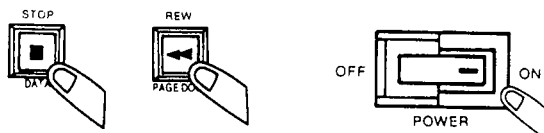
#### << DRUM ON TIME >>

Turn on the Power while the STOP and FF buttons are depressed.



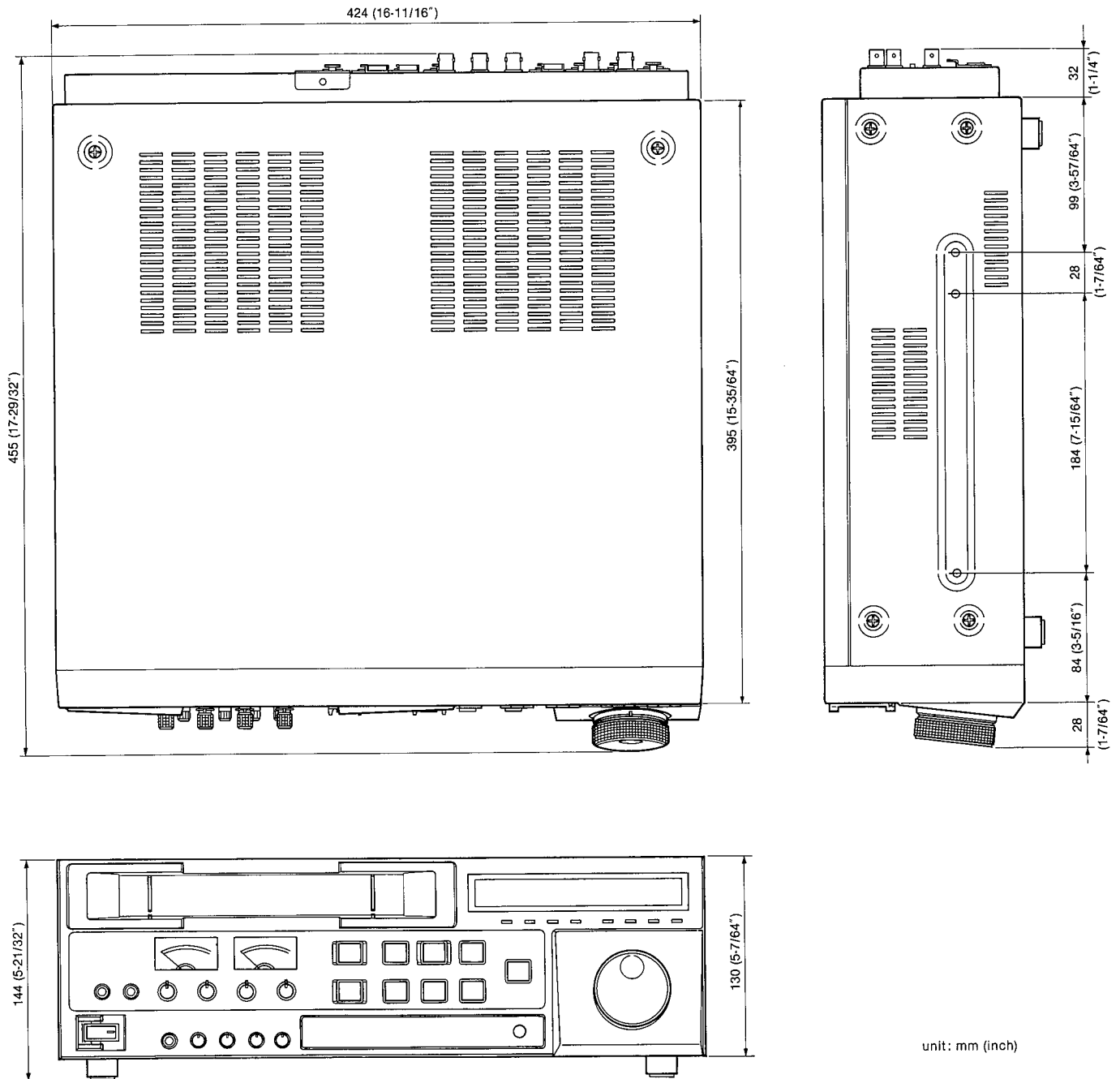
#### << CAPSTAN ON TIME >>

Turn on the Power while the STOP and REW buttons are depressed.





# 5. DIMENSIONS





# SECTION 1

## OPERATING INSTRUCTIONS

1

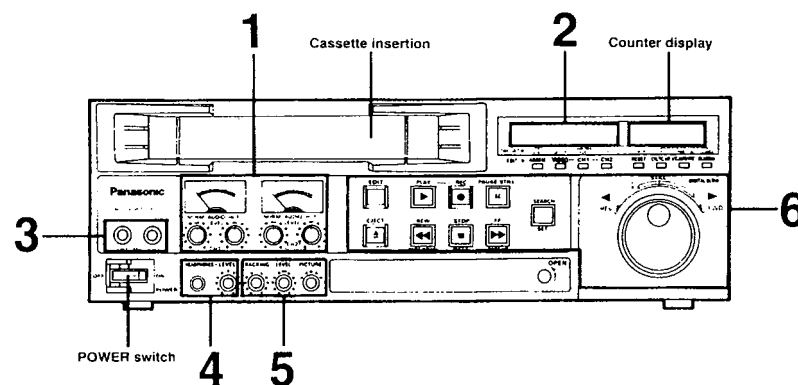
OPERATING INSTRUCTIONS

### CONTENTS

<b>Control and Their Functions</b> .....	<b>1-2</b>
Front Panel Parts .....	1-2
Counter Display Parts .....	1-3
Rear Panel Parts .....	1-4
<b>Basic Operation</b> .....	<b>1-5</b>
Switching on the Power .....	1-5
Installing a Cassette .....	1-5
Recording .....	1-6
Playback .....	1-7
FF, REW, stop and pause/still .....	1-8
Search operations .....	1-8
Slow-motion playback .....	1-9
AUTO STOP function .....	1-9
<b>Switch Setting</b> .....	<b>1-10</b>
Setting the audio switches .....	1-10
Setting the video switches .....	1-10
Other switch settings .....	1-11
<b>TBC Adjustments</b> .....	<b>1-11</b>
<b>Editing Operations</b> .....	<b>1-13</b>
Before proceeding with editing .....	1-13
Selecting the editing mode .....	1-14
Executing manual editing .....	1-14
AUTO CUT OUT editing (simple automatic editing) .....	1-15
Split editing .....	1-16
Precautions for editing .....	1-16
<b>Dial Menu Functions</b> .....	<b>1-17</b>
Using the dial menu functions .....	1-17
Set-up menu screen .....	1-18
<b>Time Code</b> .....	<b>1-23</b>
Time code/user's bit .....	1-23
Setting the time code switches .....	1-23
Recording the time code/user's bit .....	1-24
Playing back the time code/user's bit .....	1-24
Superimpose screen .....	1-25
<b>Connections</b> .....	<b>1-26</b>
Connections for basic system .....	1-26
Dubbing connections .....	1-26
System using 9P editing controller .....	1-27
System using remote search controller .....	1-28
System using 34P editing controller .....	1-28
System using M II unit .....	1-29
<b>Others</b> .....	<b>1-29</b>
Error displays .....	1-29
Servo reference .....	1-30
Connector signals .....	1-30



## Front panel parts



### 1. Level control area

- Audio (CH1) level meter: ..... Displays CH1 audio level.
- Audio (CH2) level meter: ..... Displays CH2 audio level or tracking level/video level
- Audio (CH1) NORMAL LEVEL control: ..... Adjusts recording level for normal audio CH1.
- Audio (CH1) HI-FI LEVEL control: ..... Adjusts recording level for Hi-Fi audio CH1.
- Audio (CH2) NORMAL LEVEL control: ..... Adjusts recording level for normal audio CH2.
- Audio (CH2) HI-FI LEVEL control: ..... Adjusts recording level for Hi-Fi audio CH2.

### 2. Function display lamp area

- WIDE lamp: ..... Lights during WIDE signal recording and WIDE tape playback.
- Cassette "in" lamp [ ]: ..... Lights when a cassette is loaded.
- S-VHS lamp [ ]: ..... Lights in S-VHS mode.
- Hi-Fi lamp: ..... Lights when Hi-Fi audio is recorded or played back
- DOLBY\* NR lamp: ..... Lights when Dolby NR system is used.
- FRAME lamp: ..... Lights in framing servo lock mode.
- LIMITER lamp: ..... Lights when audio limiter is on.
- CH2-TC lamp: ..... Lights when audio CH2 is used as an LTC track.
- SERVO lamp: ..... Lights in servo lock mode.
- CTL/TC/UB lamps: ..... Lamp corresponding to selected counter display mode lights
- LTC/AUTO/VITC lamps: ..... Lamp corresponding to selected time code mode lights

### 3. Microphone area

- MIC jacks (CH1/CH2): ..... Connectors for M6 external microphones.

### 4. Headphone area

- HEADPHONE jack: ..... Connects M6 stereo headphones.
- HEADPHONE LEVEL control: ..... Adjusts headphones volume.

### 5. Picture quality adjustment area

- TRACKING control: ..... Adjusts noise position.
- VIDEO LEVEL control: ..... Adjusts input video level (push-pull type).
- PICTURE control: ..... Adjusts softness/sharpness of playback picture.

### 6. Basic operation area

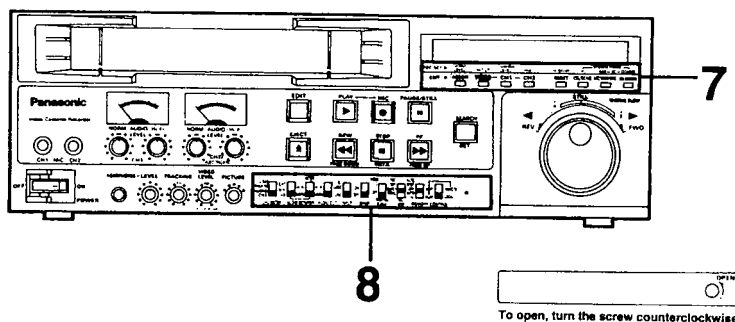
- EDIT button: ..... Starts editing when pressed together with PLAY button.
- PLAY button: ..... Starts playback.
- REC button: ..... Starts recording when pressed together with PLAY button.
- PAUSE/STILL button: ..... Establishes still-picture mode during playback and pause mode during recording.
- EJECT button: ..... Ejects cassette.
- REW (PAGE DOWN) button: ..... Rewinds the tape; scrolls down page in MENU mode.
- STOP (DATA) button: ..... Stops all operations; sets data in MENU mode.
- FF (PAGE UP) button: ..... Rapidly advance the tape; scrolls up page in MENU mode.
- SEARCH (SET) button: ..... Executes and releases search; sets menu in MENU mode; sets standard level in TBC set mode.
- SEARCH/JOG dial: ..... Adjusts search speed (outer dial for SHUTTLE mode; inner dial for JOG mode); selects menu in MENU mode; sets level in TBC set mode.

\*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

\*\*"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



## Front panel parts (cont.)



### 7. Editing mode setting area/TBC mode setting area

- ASSEMBLE (VIDEO LEVEL) button:** Sets assemble editing; sets video level in TBC mode.
- INSERT VIDEO (SET UP) button:** Performs insert editing of video signals and Hi-Fi audio signals; sets setup level in TBC mode.
- INSERT AUDIO-CH1 (CHROMA LEVEL) button:** Performs insert editing of normal audio CH1; sets chroma level in TBC mode.
- INSERT AUDIO-CH2 (HUE) button:** Performs insert editing of normal audio CH2 or TC; sets hue in TBC mode.
- RESET (YC DELAY) button:** Resets counter; sets YC delay in TBC mode.
- CTL/TC/UB (SYSTEM H PHASE) button:** Switches counter mode; sets system H phase in TBC mode.
- LTC/AUTO/VITC (SYSTEM SC PHASE FINE) button:** Switches time code read mode; sets system SC phase fine adjustment in TBC mode.
- ON SCREEN (SYSTEM SC PHASE COARSE) button:** Displays data on monitor TV; sets system SC phase coarse adjustment in TBC mode.

### 8. Function setting area

- CH2 METER switch:** Switches between tracking/video meter and audio CH2.
- AUDIO MONITOR switch:** Selects monitor audio channel.
- AUDIO MONITOR (METER) switch:** Switches monitor audio type.
- AUDIO OUT switch:** Switches output audio type.
- INPUT switch:** Switches video input signal.
- DNR switch:** DNR operation switch (Y and C levels set using the setup menu).
- DIGITAL SLOW switch:** Changes digital slow setting and dial speed mode.
- DIAL MODE switch:** Switches search dial mode.
- MEMORY switch:** Switches memory mode when CONTROL switch is set to "LOCAL"; switches editing mode when CONTROL switch is set to "REMOTE" (34-pin controller only).
- CONTROL switch:** Switches between remote and local modes.

## Counter display parts

When the DIAL MODE switch is at the SEARCH position:

Mode	Counter Display	Remarks
CTL	- 8 : 88 : 88 : 88	The shaded area remains blank for CTL interpolation while a colon appears in the non-drop frame mode and a period indicates the drop frame mode.
TC	88 : 88 : 88 : 88	
UB	88 88 88 88	

When the DIAL MODE switch is at the MENU position:

Mode	Counter Display	Remarks
SELECT PAGE	5U : 88 88	The shaded area flashes on and off.
SET PAGE	5U : 88 88 : 88	
TC PRESET	88 : 88 : 88 : 88	The input digits flash on and off.
UB PRESET	88 88 88 88	

### Hour meter display

The following items area indicated alternately while the RESET button is kept depressed.

Mode	Counter Display	Remarks
Capstan rotation cumulative time	L 88 88 84	Set the CONTROL and DIAL MODE switches to REMOTE and MENU, respectively.
Total drum rotation time	d 88 88 84	

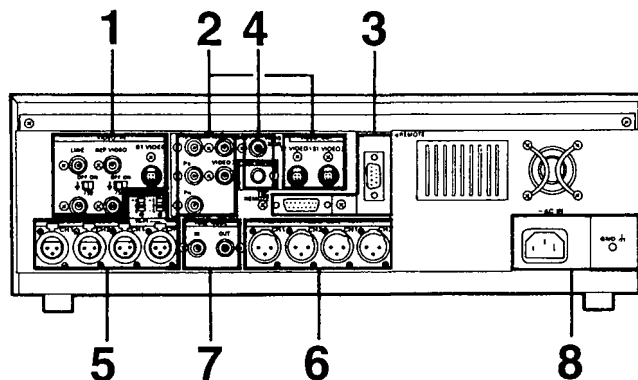
### VITC position display

The following items are displayed while the RESET button is kept depressed.

Mode	Counter Display	Remarks
When reading of VITC position was possible	88 : 88 L	Set the CONTROL and DIAL MODE switches to REMOTE and SEARCH, respectively.
When reading of VITC position was not possible	- - - - L	



## Rear panel parts



### 1. Video input signal area

**S1-VIDEO IN connector:** ..... S1-VIDEO signal input connector.  
**REF VIDEO IN connector:** ..... Input connector for external reference signal (with loop-through 75  $\Omega$  termination switch).  
**LINE IN connector:** ..... Video signal input connector (with loop-through 75  $\Omega$  termination switch).

### 2. Video output signal area

**S1-VIDEO OUT (1, 2) connectors:** ..... S1-VIDEO signal input connector.  
**VIDEO OUT (1, 2) connectors:** ..... Video signal output connectors.  
**COMPONENT OUT connectors:** ..... Component signal output connectors.

### 3. Remote signal area

**TBC REMOTE connector:** ..... Connector for TBC remote controller.  
**REMOTE 9P connector:** ..... Connector for editing controller (9P).

### 4. Monitor output signal area

**VIDEO connector:** ..... Output connector for video monitor signal.  
**AUDIO connector:** ..... Output connector for audio monitor signal.

### 5. Audio input signal area

**Input audio level switches:** ..... Set input level to  $-60/+4$  dB.  
**NORM/Hi-Fi audio input connectors:** ..... NORM/Hi-Fi audio (CH1/2) input connectors.  
**Hi-Fi audio input connectors:** ..... Input connectors for hi-fi sound only.

### 6. Audio output signal area

**NORM/Hi-Fi audio output connectors:** ..... NORM/Hi-Fi audio (CH1/2) output connectors.  
**Hi-Fi audio output connectors:** ..... Output connectors for hi-fi sound only.

### 7. Time code signal area

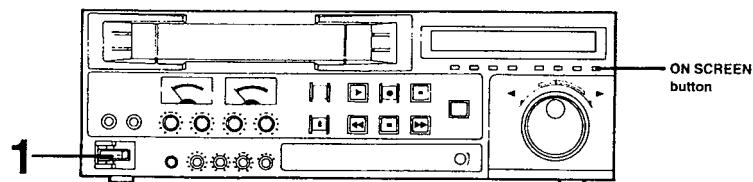
**TIME CODE IN connector:** ..... Time code signal input connector.  
**TIME CODE OUT connector:** ..... Time code signal output connector.

### 8. Power supply circuit area

**GND terminal:** ..... When connecting this unit to any other component, make absolutely sure that it is properly grounded by connecting this terminal.  
**AC IN socket:** ..... Selected to AC 120V power outlet.



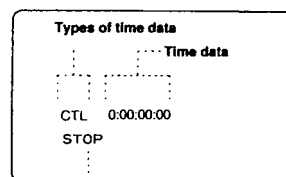
## Switching on the power



### 1. Press the POWER switch.

The power is now supplied to the unit.

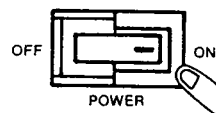
- The display below appears through VIDEO MONITOR OUT connector if the ON SCREEN button is pressed.



#### VTR operation mode

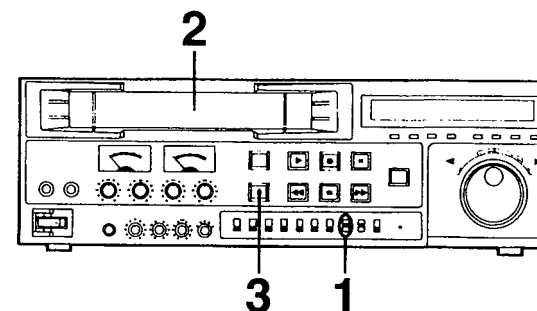
This appears only when item No. 4004 of the dial menu function is ON.

- If an error appears on the display, stop operation immediately and read page 61.



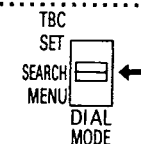
1-5

## Installing a cassette



### 1. Set the DIAL MODE switch to SEARCH.

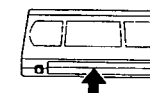
- When the DIAL MODE switch is at "MENU", operations not relating to the dial menu functions cannot be performed; when it is at "TBC SET", operations other than PLAY, STOP, FF, REW, EJECT, REC, PAUSE, EDIT cannot be performed.



### 2. To install the cassette tape:

Insert the tape in the slot provided and push the center area of the cassette gently.

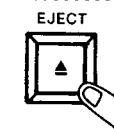
The cassette "in" lamp now lights in the function display lamp area.



### 3. To remove the cassette tape:

Press the EJECT button. Draw the emerging cassette tape out straight toward you.

The cassette "in" lamp now goes off.



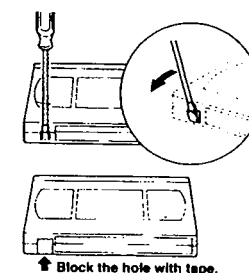
## MEMO

### To prevent accidental erasure of recorded material:

Break out the tab to prevent further recording.

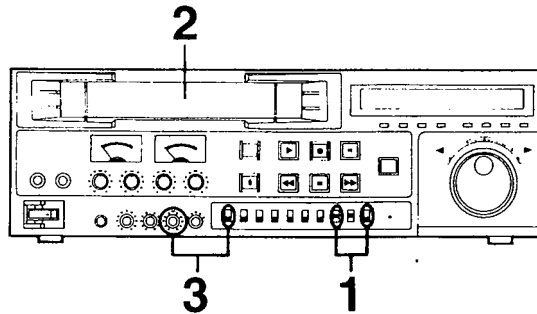
### To re-record:

Block the tab hole with cellophane tape.





# Recording



## 1. Set the switches (see pages 22 to 24).

CONTROL switch → LOCAL  
DIAL MODE switch → SEARCH

## 2. Install the cassette tape (see page 13).

Check that the tab on the recording tape for preventing accidental erasure has not been broken out.



## 3. Adjust the recording level.

[1] Set the CH2 METER switch to "VIDEO TRACKING."

[2] Automatic adjustment

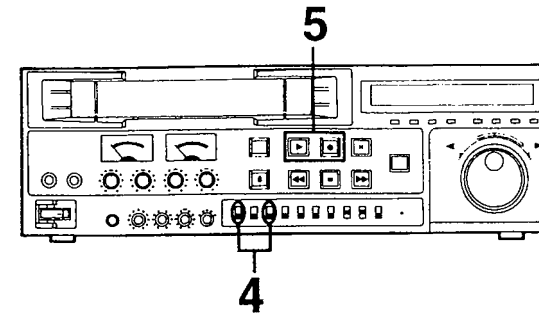
Press in the VIDEO LEVEL control. The recording level will now be adjusted automatically.

[3] Adjustment to desired level

Pull out and turn the VIDEO LEVEL control.

The appropriate recording level is where "0" is indicated on the level meter.

- The AUDIO CH2 level meter indicates the recording level during recording.



## 4. Adjust the audio recording level.

[1] Set the CH2 METER switch to "AUDIO CH2."

[2] Select the type of sound whose level is to be adjusted.

Use the METER switch for this.

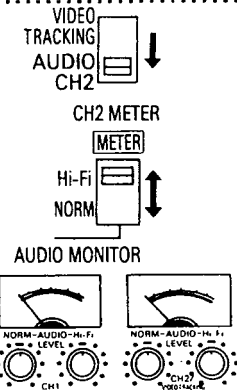
HI-FI: The meter displays the hi-fi audio level.

NORM: The meter displays the normal audio level.

[3] Level adjustment

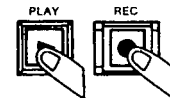
Rotate the level controls and set them to the highest possible value where the pointers do not pass beyond the "0" position on the level meters.

- Set the "AUDIO LIMITER" (item No. 3002) dial menu function to "OFF" before proceeding with the normal audio level adjustment.



## 5. Press the REC and PLAY buttons together.

Recording now starts.

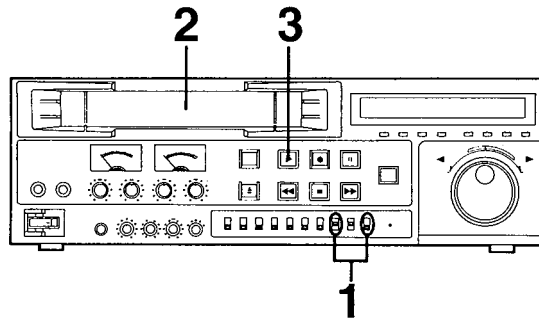


## MEMO

- The dial menu functions are used to activate the audio limiter function and Dolby NR system (see page 42). When the audio limiter function is activated, the automatic volume limiter circuit operates to ensure that the sound is recorded without distortion even if the input level should reach an excessively high level during recording. The Dolby NR system ensures that the sound is recorded and played back with reduced tape noise (hiss).
- When recording Hi-Fi sound, set the "HI-FI REC" (item No. 3003) dial menu function to "ON".
- When the Hi-Fi sound is not to be recorded, it is not enough merely to set the level control to the "0" position. Be sure to set the "HI-FI REC" (item No. 3003) dial menu function to "OFF".
- The Hi-Fi audio input connectors can be switched using the "HI-FI INPUT SELECT" (item No. 3004) dial menu function.
- To make a recording using an external sync signal, set the "SYNC" (item No. 1001) dial menu function to "EXT".

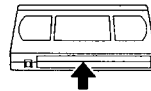


# Playback

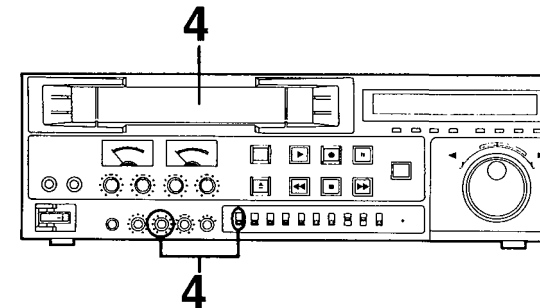


1. **Set the switches** (see page 22 to 24).  
CONTROL switch → LOCAL  
DIAL MODE switch → SEARCH

2. **Install the cassette tape** (see page 13).  
Install the tape with the recorded sound and pictures which are to be played back.



3. **Press the PLAY button.**  
Playback now commences.



4. **Adjust the tracking.**

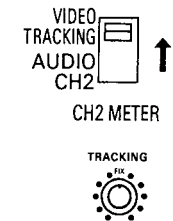
[1] Set the CH2 METER switch to "VIDEO TRACKING."

[2] Normally,

the TRACKING control is set to its center "fix" position for playback.

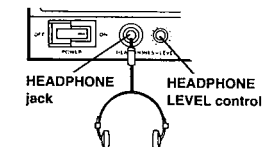
[3] When playing back a tape which has been recorded on another VTR,

turn the TRACKING control slowly to the left or right and set so that the meter pointer deflects to the maximum.



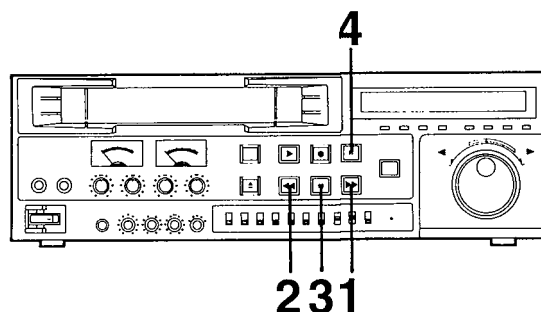
## NOTES

- Set the Dolby NR system ON using the dial menu function when playing back a tape which has been recorded using the system (see page 42).
- If the tracking shifts out of alignment during playback, the Hi-Fi lamp will go out and the Hi-Fi sound will not be output even if it was recorded.
- When using the headphones:  
The volume level may change when high-impedance headphones are connected.
- To playback a signal using an external sync signal, set the "SYNC" (item No. 1001) dial menu function to "EXIT".



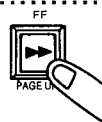


## FF, REW stop and pause/still



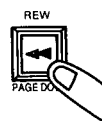
### 1. Fast forwarding the tape

Press the FF button.



### 2. Rewinding the tape

Press the REW button.



### 3. Stopping the tape

Press the STOP button.

- The STOP button lights and all operations are stopped.
- When the "PB/EE SELECT" (item No. 2004) dial menu function is set to "EE", E-E pictures will appear on the TV monitor.



### 4. Pause

Press the PAUSE/STILL button during recording or playback.

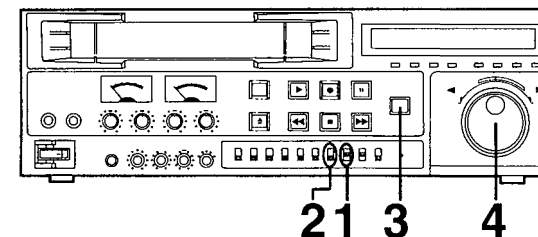
- During playback, the unit is placed in the PLAY/STILL mode and still pictures are played back.
- During recording, the unit is placed in the REC/PAUSE mode and recording is temporarily suspended.



## NOTES

- Set the CONTROL switch to LOCAL.
- Set the DIAL MODE switch to SEARCH.
- The unit is automatically placed in the tape protection mode if the STOP or PAUSE/STILL mode should continue beyond a certain period of time (which can be set using the item No. 1002 to 1004 dial menu function). (See page 39.)

## Search operations



### 1. Set the DIAL MODE switch to "SEARCH".



### 2. Set the DIGITAL SLOW switch to "1" or "OFF".



### 3. Press the SEARCH button.

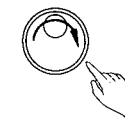
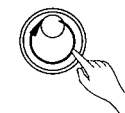
The SEARCH button, PLAY button and PAUSE/STILL button light, indicating that a search can now be performed.



### 4. Operate the search dial.

The inner dial is used for the jog mode and the outer dial for the shuttle mode.

- When the dial is turned toward the right, the tape is played back in the forward direction (the FWD lamp lights); conversely, when it is turned toward the left, the tape is played back in the reverse direction (the REV lamp lights).



#### [1] JOG mode

Turn the outer dial to the center position. The tape is played back at a speed ranging from a still picture to  $\pm 1\times$  the normal speed depending on the speed at which the inner dial is turned. When the turning of the dial is stopped, a still picture display appears regardless of the switch setting.

#### [2] SHUTTLE mode

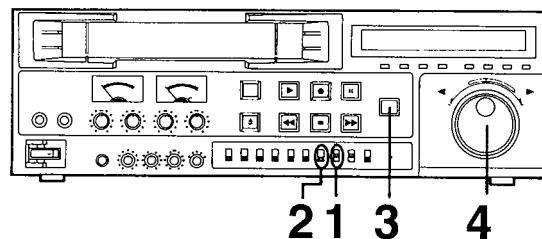
In response to the angle to which the outer dial is turned, the tape can be played back at a speed ranging from 0 to  $32\times$  faster or slower than normal tape speed. (However, when the tape approaches the end, the low-speed search mode is established in order to protect the tape from possible damage.) A still picture results at the center (click-stop) position.

## NOTES

- Keep the CONTROL switch at the LOCAL position.
- When the power has been turned on again in the SHUTTLE mode, first return the dial to its center (click-stop) position and then proceed to operate it.
- When setting the direct search mode, set the "DIRECT SEARCH" (item No. 1005) dial menu function to "ON." (See page 39.)



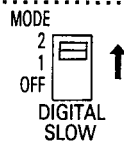
## Slow-motion playback



1. Set the DIAL MODE switch to "SEARCH".



2. Set the DIGITAL SLOW switch to "2".



3. Press the SEARCH button.

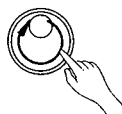
The SEARCH button, PLAY button and PAUSE/STILL button light, indicating that a search can now be performed.



4. Operate the search dial.

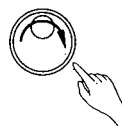
The inner dial is used for the jog mode and the outer dial for the shuttle mode.

- When the dial is turned toward the right, the tape is played back in the forward direction (the FWD lamp lights); conversely, when it is turned toward the left, the tape is played back in the reverse direction (the REV lamp lights).



### [1] JOG mode

Turn the outer dial to the center position. The tape is played back at a speed ranging from  $-1/4x$  to  $+1x$  the normal speed depending on the speed at which the inner dial is turned. When the turning of the dial is stopped, a still picture display appears regardless of the switch setting.



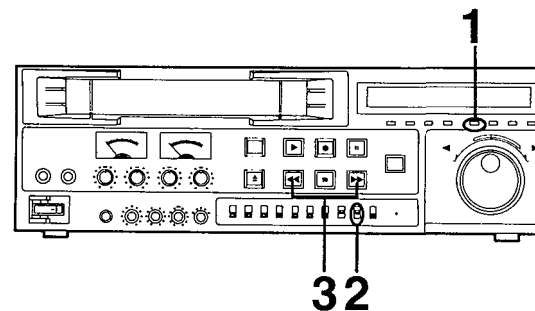
### [2] SHUTTLE mode

The tape is played back at speeds ranging from  $-1/4x$  to  $+1x$  normal speed, depending on the angle to which the outer dial is turned.

## NOTES

- Keep the CONTROL switch at the LOCAL position.
- When the power has been turned on again in the SHUTTLE mode, first return the dial to its center (click-stop) position and then proceed to operate it.
- When setting the direct search mode, set the "DIRECT SEARCH" (item No. 1005) dial menu function to "ON." (See page 39.)
- Noise may occur when a tape is played back in the reverse direction.

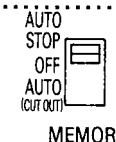
## AUTO STOP function



1. Press the RESET button at the position where the tape is to be automatically stopped.  
The tape counter displays "0:00:00.00."

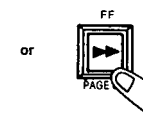


2. Set the MEMORY switch to AUTO STOP.



3. Proceed with fast forward or rewinding.

The tape automatically stops when the tape counter display nears the "0:00:00.00" mark.

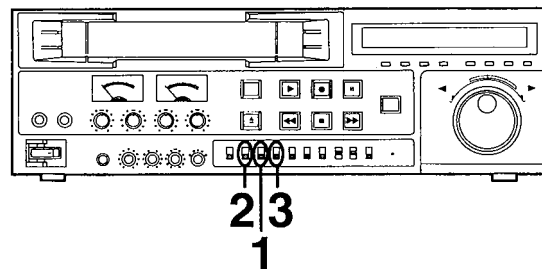


## NOTE

- The AUTO STOP function does not work when:
  - The CONTROL switch is at the "REMOTE" position.
  - The CTL/TC/UB button is at any position except "CTL."
  - DIAL MODE switch is at the "MENU" position.



## Setting the audio switches

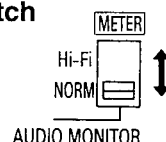


### 1. Setting the AUDIO MONITOR (METER) switch

This is used to select the sound displayed on the level meter and the sound which is output from the headphones jack on front panel or the AUDIO MONITOR connector on the rear panel.

**Hi-Fi:** Hi-Fi sound is selected.

**NORM:** Normal sound is selected.



### 2. Setting the AUDIO MONITOR switch

This is used to select the audio channel for the sound output from the headphones jack on front panel and the AUDIO MONITOR connector on the rear panel.

**CH1:** The CH1 sound is output.

**MIX:** Mixed CH1 and CH2 sound is output from the headphones jack CH1 sound is heard at the left and CH2 sound at the right.

**CH2:** The CH2 sound is output.



- No sound will be heard from normal audio CH2 when the "AUDIO CH2" (item No. 3006) dial menu function is set to "LTC".

### 3. Setting the AUDIO OUT switch

This is used to select the sound which is output from the AUDIO OUT (NORM/Hi-Fi) connectors on the rear panel.

**Hi-Fi:** Discriminates between Hi-Fi and normal audio automatically. When there is no Hi-Fi audio output signal, normal audio will be automatically outputted.

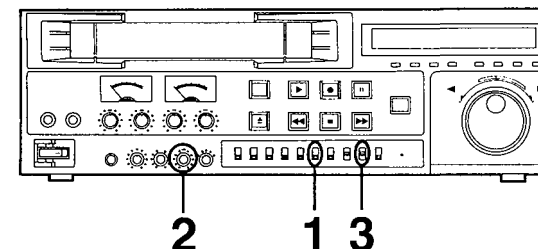
**NORM:** Normal sound is selected.



## NOTE

- Set "HI-FI REC" (item No. 3003) dial menu function to "ON", to record Hi-Fi sound.
- ON:** Hi-Fi sound and normal sound are recorded.
- OFF:** Normal sound is recorded.

## Setting the video switches



### 1. Setting the DNR (digital noise reducer) switches

■ When playing back a tape with a reduced signal-to-noise ratio, these switches can be used to reduce the noise level as warranted by the picture quality. (However, a slight deterioration in the resolution will result.)

■ Keep this switch OFF during editing. The picture may be disturbed if a tape is repeatedly edited.

■ Bear in mind that when material is dubbed repeatedly in the DNR ON mode, after-imaging will be prevalent.

■ The degree of S/N ratio enhancement can be controlled by setting dial menu function item No. 2013 and 2014.

### 2. Setting the VIDEO LEVEL control

This is used to adjust the video level automatically during recording.

**PUSH:** The video level is automatically adjusted.

**PULL:** The video level not automatically adjusted.



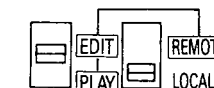
### 3. Setting the MEMORY switch

Set the CONTROL switch to "REMOTE." The switch then can be used to select whether the unit functions as source or as an editor, using the 34P controller.

**PLAY:** Unit functions as a player.

**EDIT:** Unit functions as an editor.

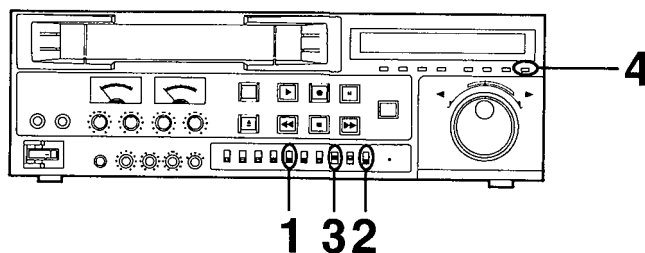
- Keep the switch at PLAY when the unit is to be used on its own.



MEMORY CONTROL



## Other switch settings

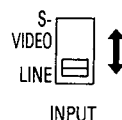


### 1. Setting the INPUT switch

During editing this switch is set to the position corresponding with the input signal.

**S-VIDEO:** When recording video signals which have been input to the S1-VIDEO IN connectors.

**LINE:** When recording video signals which have been input to the VIDEO IN connectors.



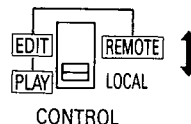
### 2. Setting the CONTROL switch

This is used to set the unit's control mode.

**REMOTE:** Set to this position for operating the unit by remote control using a controller, etc. Only the unit's eject function will now be operational.

**LOCAL:** Set to this position to operate the unit.

• The operation modes of this unit in the REMOTE mode can be set using dial menu item No. 5001.

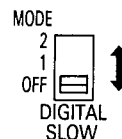


### 3. Setting the DIGITAL SLOW switch

**2:** Activates the noiseless slow mode. The search dial range is  $-1/4x$  to  $+1x$ .

**1:** Activates the noiseless slow mode. The search dial range is  $-32x$  to  $+32x$ .

**OFF:** The noiseless slow mode is not activate.



### 4. Setting the ON SCREEN button

This is used to add a time code or other superimpose signal to the video signal which is output from the VIDEO MONITOR connector.

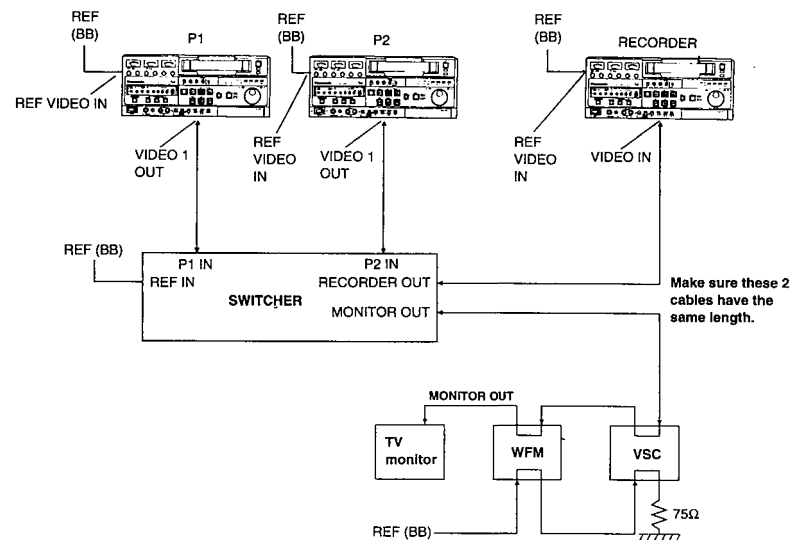


## TBC Adjustments

The TBC can be used to reduce the amount of jitter and distortion called skew (a phenomenon where the top part of the picture is bent horizontally).

For AB roll editing (a method of editing using two source units) using an editor, the TBC must be adjusted after it has been connected to the system so that the material will be edited accurately and error-free. (The TBC must be re-adjusted every time its connecting cable is replaced or its connections are changed.)

### 1. Make the connections as shown in the figure below.

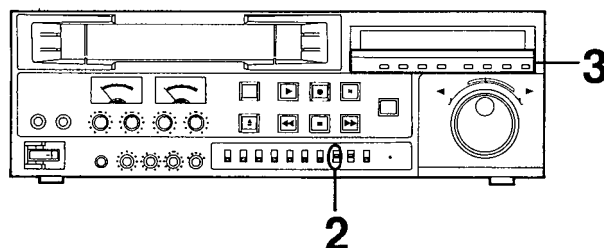


[1] Supply the external reference signal from the sync signal generator to the unit.

[2] Provide a composite connection for the video signals.



# TBC Adjustments (cont.)

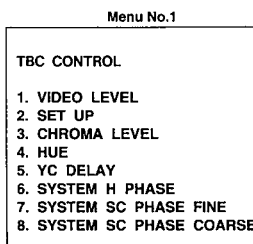


## 2. Set the DIAL MODE switch to "TBC SET."

■ The TBC SET menu (Menu No.1) is output on the monitor.

### •Notes

The first menu is not output if "TBC REMOTE" (item No. 2015) dial menu function is set to "REMOTE".  
Either set "TBC REMOTE" to "LOCAL" or use an external TBC encoder to perform adjustment.



## 3. Proceed with the discrete adjustment.

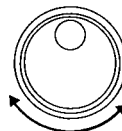
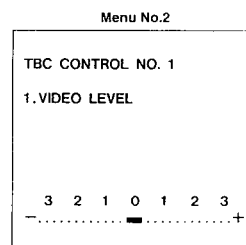
Since the TBC of this unit has already been adjusted using standard color bars, the control is normally used set to "0." If readjustment is to be required with the tape being used, proceed as follows.

- The various items correspond to the eight switches (TBC mode setting area) below the display tube, in order starting from the left.

[1] Playback a tape with color bars recorded on it.

[2] Adjust the various items.

Press the switch corresponding to the item you wish to adjust (TBC mode setting area) and Menu No.2 is displayed. Make adjustments by turning the JOG dial to move the cursor to the right or left.

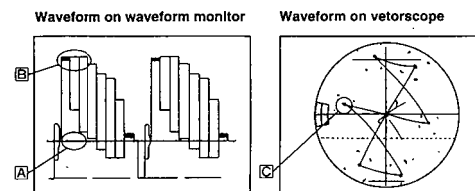


## NOTE

- No adjustments can be made on the TBC SET screen menu when the screen has stopped.

## [3] Adjust the various items.

Adjust the various items so that the displays on the waveform monitor (WFM) and vectorscope (VSC) appear as described below.



- [A]: Set-up level**  
Adjust to eliminate any deviation.
- [B]: Video level**  
Adjust to 100IRE.
- [C]: Chroma level**  
Adjust so that the specified level is obtained.
- Hue**  
Adjust so that the vector waveform traces are positioned inside the  $\oplus$  mark on the VSC.

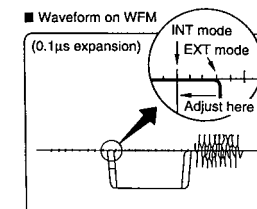
## [4] Adjust the YC delay control.

(Normally, adjustment is unnecessary.)  
Adjust this to compensate for a shift in YC delay (color shift) of the tape being played back. Each step represents an adjustment of approx. 70ns.

## [5] Adjust the SYSTEM PHASE controls.

- ① Playback the standard color bars on VTR P1.
- ② Adjust the SYS PHASE controls on VTR P1.  
Adjust them so that the waveform shown below appears on the waveform monitor (WFM).

- Set the WFM to the INT mode and set the expansion to 0.1 $\mu$ s.
- Check the horizontal sync position.
- Now set the WFM to the EXT mode.
- In the EXT mode adjust the SYS PHASE controls so that the H SYNC signal is aligned with the position above.  
First adjust H, then use SC COARSE for the overall adjustment and SC FINE for the fine adjustment.
- Adjust the SYS PHASE controls on VTR P2 similarly.



(Pay close attention to the sync signal rise.)



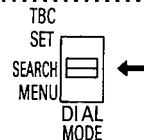
## TBC Adjustments (cont.)

### MEMO

#### Description of adjustments

VIDEO LEVEL:	Adjusts the video level.
SET UP LEVEL:	Adjusts the set-up level.
CHROMA LEVEL:	Adjusts the chroma level.
HUE LEVEL:	Adjusts the hue level.
YC DELAY:	Adjusts the YC level.
SYSTEM H PHASE:	Adjusts the phase of the horizontal sync signal from the built-in sync generator to the external reference signal supplied from the external source in order to achieve genlock.
SYSTEM SC PHASE:	Adjusts the phase of the subcarrier signal from the built-in sync generator to the external reference signal supplied from the external source in order to achieve genlock.
COARSE:	Adjustment in 4 steps of 90°
FINE:	Continuous adjustment, range of just over 90°
Together, these controls cover a 360°.	

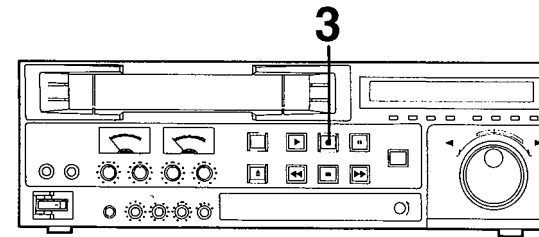
4. After completing TBC adjustments, set the DIAL MODE switch to "SEARCH."



### NOTES

- Pressing the SEARCH (SET) button when the Menu No. 1 is displayed returns the settings for all items, except for SYSTEM PHASE, to their initial values.
- Pressing the SEARCH (SET) button when Menu No. 2 is displayed returns only the setting for that item to its initial value.

## Before proceeding with editing



"Editing" consists in taking pre-recorded tapes, combining various material into one part, cutting out the parts which are not desired and connecting only what is required into a single program. There are two editing modes: assemble and insert. Complete the operations listed below before proceeding with editing.  
(CTL editing is the type of editing which is possible when only this unit is used for editing. Time code editing is not possible.)

1. Complete the adjustments and settings (see page 22 to page 28).

2. Check whether the FRAME LOCK lamp lights when the following steps are taken.

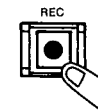
- [1] Playback the tape which is to be edited.
- [2] Use the TRACKING control on the source unit so that the TRACKING meter pointer deflects to its maximum.
- [3] Set the TRACKING control on the editor to its center clickstop position.
- [4] Set the "FRAME SERVO" (Item No. 6005) dial menu function on the editor unit to "ON".
- [5] Check that the FRAME lamp at the source unit side has lighted.
  - If the lamp is off, set the "SYNC" (Item No. 1001) dial menu function on the editor to "NORM".
- [6] Check that the FRAME lamp on the editor has lighted.
  - If the FRAME lamp is off, the edited pictures may be thrown into disarray.

3. The material to be edited can be checked on the TV monitor.

Press the REC button while playback is in progress.

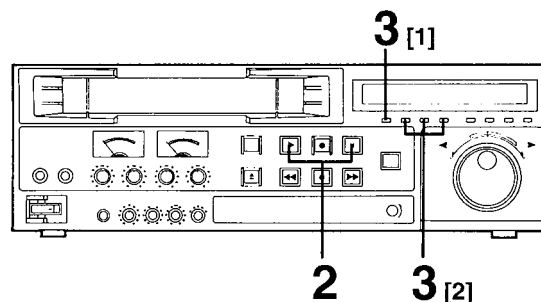
E-E pictures can be viewed while the REC button is depressed.  
Signals are not recorded onto the tape.

- E-E pictures cannot be viewed if a cassette has been inserted without its accidental erasure prevention tab.





## Selecting the editing mode

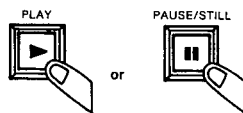


### 1. Proceed first with the editing preparations.

Refer to "Before proceeding with editing" on the previous page for details.

### 2. Set the unit to the PLAY or PLAY/STILL mode.

Press the PLAY button or PAUSE button.



### 3. Select the editing mode.

#### [1] Assemble editing

Press the ASSEMBLE button.

When it is pressed once, the button lights; when it is pressed again, its light goes off.

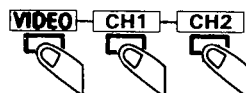


#### [2] Insert editing

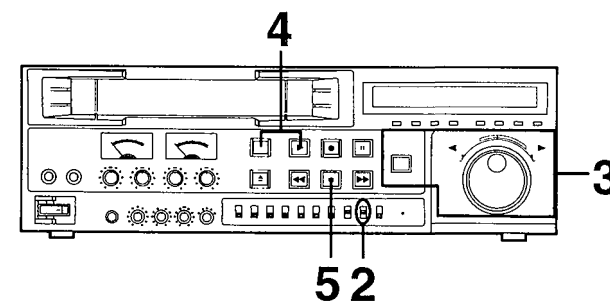
Select the INSERT (VIDEO, AUDIO-CH1, AUDIO-CH2) button corresponding to the editing.

When it is pressed once, the button lights; when it is pressed again, its light goes off.

Insert editing applies only to the signals for the button which has lighted.



## Executing manual editing

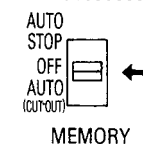


### 1. Select the editing mode.

Refer to "Selecting the editing mode" on the previous page for details.

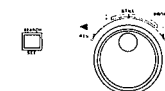
### 2. Set the MEMORY switch to OFF.

If this switch is at the AUTO (CUT OUT) position, editing will be cut out and stopped when the counter display shows "0:00:00:00."



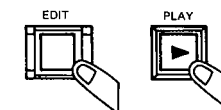
### 3. Find the edit start point by conducting a search operation and place the unit in the still picture mode.

Refer to page 19 for details on search operations.

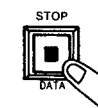


### 4. Press the PLAY button while pressing down the EDIT button.

The tape jogs back automatically for about 3 seconds, and editing commences.

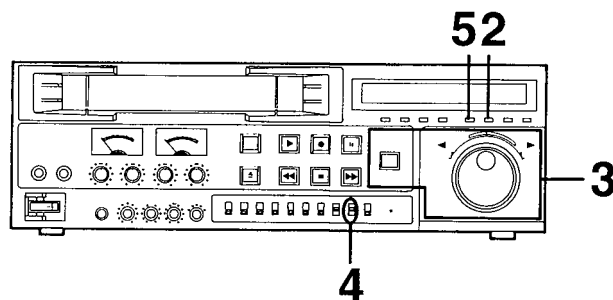


### 5. Press the STOP button to stop editing.





# AUTO CUT OUT editing (simple automatic editing)



## 1. Select the editing mode.

Refer to "Selecting the editing mode" on page 29 for details.

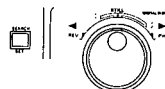
## 2. Set to CTL mode with the CTL/TC/UB

Press the CTL/TC/UB button to switch to the CTL mode. Each press of the button causes one of the function indicator lamps, "CTL," "TC" or "UB," to light.

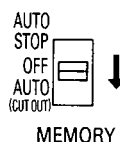


## 3. Find the edit end point by conducting a search operation and place the unit in the still picture mode.

Refer to page 19 for details on search operations.

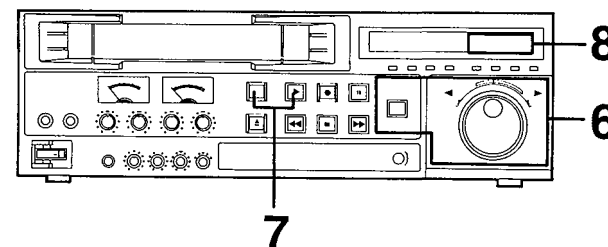


## 4. Set the MEMORY switch to AUTO (CUT OUT).



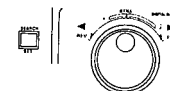
## 5. Press the RESET button.

The tape counter is reset to "0:00:00:00." The corresponding place on the tape is the edit end point.



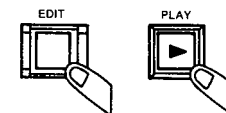
## 6. Find the edit start point by conducting a search operation and place the unit in the still picture mode.

Refer to page 19 for details on search operations.



## 7. Press the PLAY button while pressing down the EDIT button.

The tape jogs back automatically for about 3 seconds, and editing commences.



## 8. End of editing

When the tape counter reaches "0:00:00:00," editing will be automatically cut out.

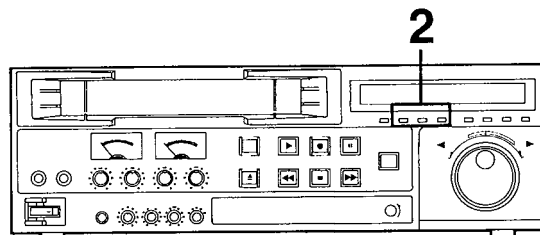
- With insert editing, the tape is rewound automatically in the vicinity of the cut out point.





## Split editing

"Split editing" consists in changing the editing signals during insert editing.



### 1. Execute insert editing.

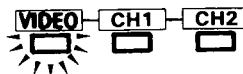
See page 30 for details.

### 2. Change the editing signals.

**Example of operation:**

Adding and inserting the AUDIO CH1 sound during the insert editing of the VIDEO/Hi-Fi signals

[1] Insert editing of the VIDEO/Hi-Fi signals in progress



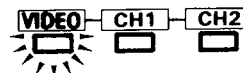
[2] Press the AUDIO CH1 button.

The AUDIO CH1 sound is insert-edited.



[3] Press the AUDIO CH1 button again.

The insert-editing of the AUDIO CH1 sound is terminated.



## NOTES

- The editing mode cannot be switched to assemble editing while insert editing is in progress.
- The editing mode cannot be switched to insert editing while assemble editing is in progress.
- The editing signals cannot be switched during the approximately 3-second long AUTO BACK operation or while the tape is traveling in preparation.

## Precautions for editing

If the EDIT START button is pressed without the editing mode having been set, the edit mode buttons (ASSEMBLE, VIDEO Hi-Fi, AUDIO CH1, AUDIO CH2) flash 6 times to prompt the operator to select the mode.

Due to the preroll requirements, a pre-recorded section lasting at least 3 seconds must precede the edit start point. Editing cannot be conducted from the very start of the tape.

Normally, the controller's preroll time is set to 5 or more seconds. However, when phase-synchronized editing is not to be performed, editing is possible with a 3-second preroll time by using an external sync signal (EXT).

### Precaution for assemble editing

- Bear in mind that about 2 seconds of the original recording after the edit end point will be erased.

### Precautions for insert editing

- The picture will be thrown into disarray at the edit start and end points if insert editing is conducted using the VHS system on a tape which has been recorded using the S-VHS system.
- Since the control signal is used for the editing, make sure that the edit period does not extend beyond the recording made on the tape.

### Precautions for EE picture

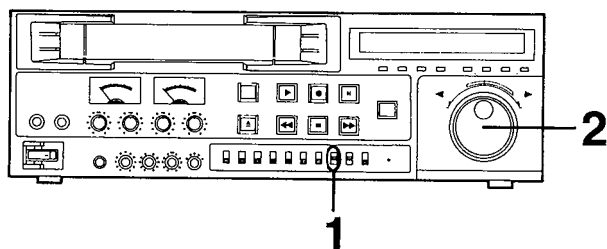
**NON V-FLOAT:** The positions of the external sync signal and EE picture's V-SYNC signal tally. The video start line is delayed by an amount equivalent to the time taken by the Time Base Corrector and other processing.

**V-FLOAT:** The positions of the external sync signal and EE picture's V-SYNC signal do not tally but the proper relationship between the video start line and V-SYNC signal is maintained.

- With the "SYNC" (item No. 1001) dial menu at "EXT," the NON V-FLOAT mode is established when the MEMORY switch is at "PLAY" and the V-FLOAT mode is established when the MEMORY switch is at "EDIT."
- At the V-FLOAT position, the EE picture may move slightly in the perpendicular direction.



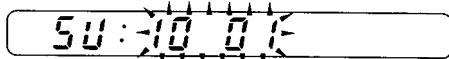
# Using the dial menu functions



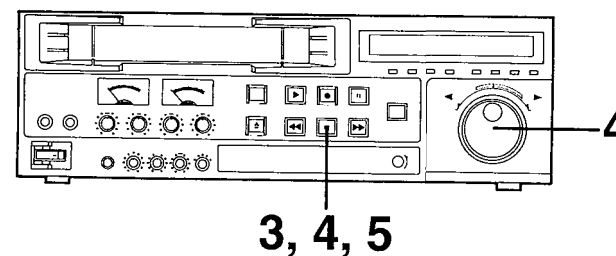
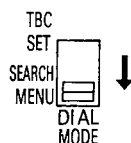
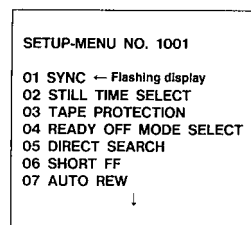
## 1. Set the DIAL MODE switch to MENU.

This disables all operations except those relating to the dial menu functions.  
(This unit remains in the mode which was established before the dial menu functions were displayed.)

The following appears on the display.

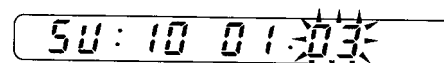


The SETUP-MENU screen appears on the monitor which is connected to the MONITOR VIDEO connector.  
The monitor display shows the following.

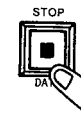
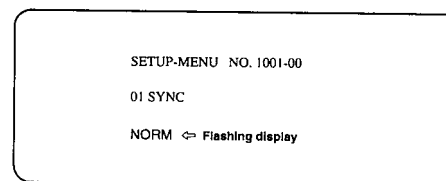


## 3. Press the STOP button when the desired item is located.

The set-up change screen is displayed while the STOP button is kept depressed.  
The following appears on the display.



The monitor display shows the following.



## 4. Turn the JOG dial while pressing the STOP button.

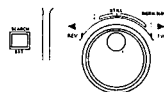
The flashing display changes. Set the item to the desired value.



## 2. Turn the JOG dial and locate the setting item

When it is turned clockwise, the number is successively incremented from 1001 → 1002 → 1103 → etc. Conversely, when it is turned counterclockwise, the number is successively decremented. (The selected item is indicated by flashing.)

- Press the FF (page up) or REW (page down) button to scroll the menu up or down in 1-page units.



## 5. Release the STOP button.

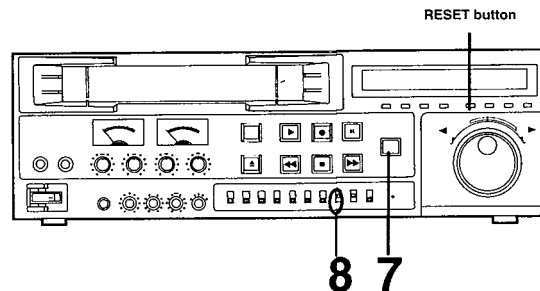


## NOTE

- The setting method differs for item No. 2008, 7010 and 7011. (See page 47.)



## Using the dial menu functions (cont.)



### 6. Repeat steps 3 to 5.

Set all the items whose set-up is to be changed to the desired value.

### 7. Upon completion of the settings, press the SEARCH (SET) button.

The set-up changes are now entered, and the following message appears.

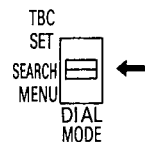
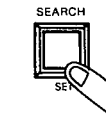
[SETUP-MENU END]  
SET TO SEARCH POS

■ The display indication returns to the normal counter indication.

### 8. Return the DIAL MODE switch to SEARCH.

The normal screen is returned.

- If the switch is returned to SEARCH without the SET button having been pressed in step 7, the settings will not be entered.



### MEMO

- To return set-up items to their original (factory-set) settings, press the RESET button when the SETUP-MENU is indicated. The following message appears.

SETUP-MENU INIT. SET  
OK ? (PUSH PLAY KEY)

The values are restored to their original settings when the PLAY button is pressed.

## Set-up menu screen

### Operation/function set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
1001	SYNC	00	NORM	Selects the sync signal. 00: Synchronization with the input video signal. 01: Synchronization with the external sync signal.
		01	EXT	
1002	STILL TIME SELECT	00	2 SEC	When the unit is in the STOP or STILL mode, this selects the duration of time after which the unit is automatically placed in the TAPE PROTECTION mode in order to protect the tape. The setting is valid from the next time the STOP or STILL mode is activated.
		01	30 SEC	
		02	1 MIN	
		03	5 MIN	
1003	TAPE PROTECTION	00	READY OFF	Selects the operation to be performed in the TAPE PROTECTION mode. The setting is valid from the next time the TAPE PROTECTION mode is activated. 00: The READY OFF mode is established. 01: Each time the duration specified by the STILL TIME SELECT setting elapses, the tape is advanced three frames, and the unit enters the READY OFF mode approximately 30 minutes later.
		01	AUTO ADVANCE	
1004	READY OFF MODE SELECT	00	DRUM ROTATE	Selects the operation in the READY OFF mode. 00: Drum rotates due to loose tape. 01: Drum stops due to loose tape. 02: Unloading
		01	DRUM STOP	
		02	UNLOADING	
1005	DIRECT SEARCH	00	OFF	Selects the direct search mode. 00: Normal search operation 01: Unit is automatically placed in the search mode when the search dial is operated even without the search button being pressed.
		01	ON	
1006	SHORT FF	00	OFF	Selects the short FF function. 00: No short FF operation. 01: Short FF operation is conducted at tape start.
		01	ON	
1007	AUTO REW	00	OFF	Selects the auto rewind function. 00: Stops at tape end. 01: When the tape reaches the end, it is automatically rewound to the start and the unit stops operating.
		01	ON	
1008	AUTO BACK	00	OFF	Sets the auto back space recording function. 00: Normal recording/pause mode 01: When the REC button is pressed in the PLAY/STILL mode or if the PAUSE/STILL button is pressed during recording, the tape is rewound for about 3 seconds and the unit is placed in the standby mode. When the PAUSE/STILL button is then pressed, the unit conducts playback for 3 seconds and then recording commences.
		01	ON	

[The shading denotes the initial setting.]



# Set-up menu screen (cont.)

## Video set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
2001	IMAGE MODE SELECT	00	NORMAL	00: Select this setting for normal operation. The noise canceler and CAC function operate for both the luminance and chrominance signals. 01: Select for editing.
		01	EDIT	
2002	VIDEO MODE	00	COLOR	Selects the color mode of the input video signal. 00: Automatically detects color mode by the input signal. 01: Forces black-and-white mode operation.
		01	B/W	
2003	Y/C FILTER TYPE	00	ADAPTIVE 3D	Select the Y/C separation system. 00: The adaptive 3-dimensional Y/C separation mode is established. 01: The 3-line Y/C separation mode is established.
		01	2D	
2004	PB/EE SELECT	00	PB/EE	Sets the image that appears on the screen when the unit is in the STOP mode. 00: The playback image is output. 01: The EE image is output.
		01	EE	
2005	WIDE MODE SELECT	00	AUTO	Sets the unit's operation for WIDE IDs. 00: Records a WIDE ID on the tape when wide data is encountered in the input signal during recording. During playback, wide data is added to the Y and C output signals if there is a WIDE ID on the tape. 01: Appends wide data to the Y/C output signal and records a WIDE ID on the tape during recording. 02: No wide data is accepted.
		01	WIDE	
		02	NORMAL	
2006	S-VHS REC	00	OFF	Selects the recording format. 00: Recording are made in VHS format. 01: Recording are made in S-VHS format. (With an S-VHS tape only)
		01	ON	
2007	HSW BLANKING SELECT	00	OFF	Specifies whether masking processing is to be performed in the switching area during playback.
		01	ON	
2008	V BLANKING SELECT	10	OFF/ON	Specifies for each individual line whether to perform masking processing in the input signal vertical blanking interval during playback. 10 : 10_LINE 17 : 17_LINE 11 : 11_LINE 18 : 18_LINE 12 : 12_LINE 19 : 19_LINE 13 : 13_LINE 14 : 14_LINE 15 : 15_LINE 16 : 16_LINE
		11	OFF/ON	
		12	OFF/ON	
		13	OFF/ON	
		14	OFF/ON	
		15	OFF/ON	
		16	OFF/ON	
		17	OFF/ON	
		18	OFF/ON	
		19	OFF/ON	
2009	SLOW DANCING COMP	00	OFF	Selects whether or not to perform compensation for dancing during digital slow playback.
		01	ON	

[The shading denotes the initial setting.]

## Video set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
2010	DOC SELECT	00	3LINE-3D	Selects the DOC mode. 00: 2-dimensional DOC up to 3H; 3-dimensional DOC for 4H and above. 01: 3-dimensional DOC (field DOC)
		01	3D ONLY	
2011	FREEZE AT READY OFF	00	OFF	Selects whether or not to freeze the screen when READY OFF takes place. 00: Do not freeze. 01: Freeze.
		01	ON	
2012	FREEZE AT STOP	00	OFF	Selects whether or not to freeze the screen when switching from PLAY to STOP. 00: Do not freeze. 01: Freeze the odd field. 02: Freeze the even field. 03: Perform frame freeze.
		01	ODD	
		02	EVEN	
		03	FRAME	
2013	Y-DNR LEVEL SELECT	00	OFF	Selects the DNR level for the luminance signal. 00: Performs no DNR processing on the luminance signal. 01: Performs DNR level 1 processing on the luminance signal. 02: Performs DNR level 2 processing on the luminance signal.
		01	LEVEL 1	
		02	LEVEL 2	
2014	C-DNR LEVEL SELECT	00	OFF	Selects the DNR level for the chrominance signal. 00: Performs no DNR processing on the chrominance signal. 01: Performs DNR level 1 processing on the chrominance signal. 02: Performs DNR level 2 processing on the chrominance signal.
		01	LEVEL 1	
		02	LEVEL 2	
2015	TBC REMOTE	00	LOCAL	Selects the TBC adjustment mode. 00: Adjustment is performed from the TBC SET. 01: Adjustment is performed by remote control from outside.
		01	REMOTE	
2017	COMPONENT OUT LEVEL	00	LOW	Sets the output level of the COMPONENT OUT connector. 00: Outputs an MII component signal. 01: Outputs a Betacam component signal.
		01	HIGH	
2019	TBC CONTROL SELECT	00	V-FLOAT	Used to float the internal SYNC to enable H to be aligned with the reference signal and V to be aligned with the input signal. 00: Floating 01: Not floating
		01	NO V-FLOAT	

[The shading denotes the initial setting.]



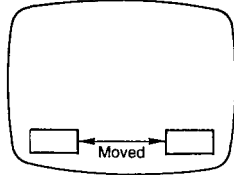
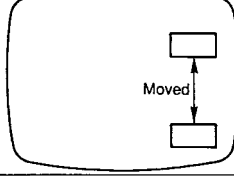
## Set-up menu screen (cont.)

### Audio set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
3001	DOLBY NR	00 OFF 01 ON		Sets the Dolby NR system. 00: Dolby NR system OFF. 01: Dolby NR system ON.
3002	AUDIO LIMITER	00 OFF 01 ON		Set the audio limiter function. 00: Dynamic volume is recorded in its original form. 01: Automatic volume limiter circuit operates to enable sound to be recorded without distortion even when the input level reaches an excessively high level at moments during recording. (This function works for normal sound only.)
3003	HI-FI REC	00 OFF 01 ON		Selects the Hi-Fi recording setting. 00: Only normal audio is recorded; no Hi-Fi audio is recorded. 01: Both Hi-Fi and normal audio are recorded.
3004	HI-FI INPUT SELECT	00 HI-FI INPUT 01 NORMAL INPUT		Selects input connectors during Hi-Fi sound recording. 00: Hi-Fi audio input connectors 01: NORM/Hi-Fi audio input connectors
3005	CH1 REC	00 CH1 01 MIX		Selects the input during normal sound CH1 recording. 00: Records CH1 sound. 01: Records mixed CH1/CH2 sound.
3006	AUDIO CH2	00 AUDIO 01 LTC		Switches normal audio on or off in CH2. 00: CH2 is used for audio recording. 01: CH2 is used as the LTC track.

[The shading denotes the initial setting.]

### Superimpose set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
4001	CHARACTER	00 01		Selects background mode for VIDEO MONITOR superimpose display.  00: Black display = LTCR 00:00:00:00 01: Edge display = LTCR 00:00:00:00
4002	CHARACTER H-POSITION	00 01 02 03 04 05 06 07		Selects horizontal position for VIDEO MONITOR superimpose display; moves characters to right as No. is increased. 
4003	CHARACTER V-POSITION	00 01 02 03 04 05 06 07		Selects horizontal position for VIDEO MONITOR superimpose display; moves characters to right as No. is increased. 
4004	STATUS SUPER	00 OFF 01 ON		Selects whether VTR operation mode is to be indicated as a superimposed display. 00: VTR operation not displayed. 01: VTR operation displayed.

[The shading denotes the initial setting.]



## Set-up menu screen (cont.)

### Remote set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
5001	EJECT/STOP FNCTN REM.	00	POSSIBLE	Enables or disables operation of panel EJECT/STOP button in remote mode. 00: Enables operation. 01: Disables operation.
		01	NOT POSSIBLE	
5002	9P DEVICE TYPE SELECT	00	OTHER TYPES	Selects ID code returned to 9P device type request command. 00: When connecting a controller not made by Panasonic. 01: When connecting a controller made by Panasonic.
		01	S-VHS ID	
5003	9P FF/REW MODE	00	LOADING	Selects the unit's operation in response to FF and REW commands. 00: FF or REW are executed with the tape loaded. 01: FF or REW are executed after the tape is unloaded.
		01	UNLOADING	
5004	34P SHTL MAX SPEED	00	*10	Sets maximum shuttle speed when controlled by 34P controller. 00: 10x normal tape speed 01: 20x normal tape speed
		01	*20	
5005	34P CONTROLLER TYPE	00	TYPE-1 A750 A770 A800	Selects type of 34P controller to be connected.
		01	TYPE-2 A650 A500 A505	

[The shading denotes the initial setting.]

### Editing set-up values

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
6001	DROP/NON-DROP FRAME	00	NON-DROP FRAME	Sets whether to compensate time deviations for time code or control signal. 00: Non-drop frame processing; time deviations are not compensated; 30 frames are processed as 1 second. 01: Drop frame processing; deviations between color sync and real time are compensated. Two frames (.00 .01) are skipped from start of positive numbers except 0, 10, 20, 30, 40 and 50.
		01	DROP FRAME	
6002	AUTO PREROLL ENTRY	00	NOT ENTERED	Selects whether to enter IN point by preroll command when IN point has not been entered. 00: Not entered 01: Entered
		01	ENTERED	
6003	PREROL TIME	00	0 SEC	Selects preroll time for 9P control from 0 to 15 sec.
		01	1 SEC	
		05	5 SEC	
		10	10 SEC	
		15	15 SEC	
6004	PLAY DELAY	00	0 FRAME	Selects play delay time during play start from 0 to 15 frames.
		01	1 FRAME	
		05	5 FRAME	
		10	10 FRAME	
		15	15 FRAME	
6005	FRAME SERVO	00	OFF	Sets framing mode 00: Set to this position when signals not in conformity with EIA standard signals (RS-170) are supplied. Framing is not conducted. 01: Framing is conducted if set to this position when signals in conformity with EIA standard signals (RS-170) are supplied.
		01	ON	

[The shading denotes the initial setting.]



## Set-up menu screen (cont.)

### Time code set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
7001	TC INT/EXT SELECT	00	INT	Set this switch to EXT if an external time code connection has been made.
		01	EXT	
7002	VIDEO MODE	00	REGEN	Selects the TC mode. 00: Operates to maintain continuity of the data on the tape. 01: Uses an internal preset value to advance the tape only during recording. 02: Uses an internal preset value to advance the tape all the time.
		01	REC RUN	
		02	FREE RUN	
7003	VITC REC	00	OFF	Selects whether or not to use VITC recording. 00: Don't use VITC recording. 01: Use VITC recording.
		01	ON	
7004	VITC POSITION SEL-1	00	10 LINE	Selects VITC signal insertion line.  *Same line as No. 7005 cannot be selected. (Avoid selecting an adjoining line.)
		01	11 LINE	
		05	15 LINE	
		06	16 LINE	
		09	19 LINE	
		09	19 LINE	
7005	VITC POSITION SEL-2	00	10 LINE	Selects VITC signal insertion line.  *Same line as No. 7004 cannot be selected. (Avoid selecting an adjoining line.)  <b>Note:</b> Do not select line 10 or 11 if the TBC facility is to be used at ON. Skew may make it impossible to read the VITC. There is no effect in the BYPASS mode.
		01	11 LINE	
		07	17 LINE	
		08	18 LINE	
		09	19 LINE	
		09	19 LINE	
7006	VITC REGEN	00	PLAY	Selects when to use VITC REGEN processing. 00: Perform REGEN processing during playback. 01: Perform REGEN processing during playback and when recording audio.
		01	PLAY + REC	
7007	TCG REGEN MODE	00	TC*UB	Selects regeneration signal when TCG is in REGEN mode. 00: Regeneration for time code and user's bit. 01: Regeneration for time code only. 02: Regeneration for user's bit only.
		01	TC	
		02	UB	
7008	TC OUT SIGNAL REGEN	00	OFF TAPE	Sets the waveform to be output from the TIME CODE OUT connector when in the INTERNAL REGEN mode. 00: Outputs the playback signal without modification. 01: Outputs the playback signal with REGEN processing during SERVO LOCK only.
		01	REGEN	

[The shading denotes the initial setting.]

### Time code set-up items

Item		Set-up value		Description of function
No.	Superimpose display	No.	Superimpose display	
7009	UB BINARY GROUP FLAG	00	NOT SPECIFIED	Selects the way the user's bit is used using TCG generation. 00: Not character set specified. 01: 8-bit character set conforming to ISO646 and ISO2022. 02: Undefined. 03: Undefined.
		01	ISO CHARACTER	
		02	UNASSIGNED 1	
		03	UNASSIGNED 2	
7010	TIME CODE PRESET	00	TCG preset value is set while observing the screen.	Sets preset value of time code generator. 00:00:00:00-23:59:59:29
7011	U-BIT PRESET	00	UBG preset value is set while observing the screen.	Sets preset value of user's bit. 00:00:00:00-FF:FF:FF:FF
7012	9P VITC TO DUMMY LTC	00	OFF	Selects the response from 9P to CURRENT TIME SENSE when CH2 is set to "AUDIO." 00: REQUEST TIME DATA MISSING is returned. 01: VITC data is returned as LTC.
		01	ON	
7013	9P INTERPOLATED VITC	00	HOLD VITC	Selects the response method used to return the VITC CTL interpolation value from 9P in response to CURRENT TIME SENSE. 00: HOLD_VITC (74H 16H) is returned. 01: INTERPOLATED_LTC (74H 14H) is returned.
		01	INTERPOLATED LTC	

### 2008/7010/7011 setting method

- Press the STOP button at item No. 2008, 7010 or 7011.
- Turn the JOG dial and move the display to be changed (flashing display).
- The ON and OFF will switch for item No. 2008, and the value will change for item No. 7010 and 7011 when the JOG dial is turned while the STOP button is kept pressed.
- Press the SEARCH (SET) button upon completion of the settings.

- The present time code value is displayed as the initial value for item No. 7010 and 7011. When the RESET button is pressed, it will be reset to "00:00:00:00."
- Operation is not possible for item No. 7010 and 7011 unless the "TC INT/EXT SELECT" (item No. 7001) dial menu function set to "INT" and "TC MODE" (item No. 7002) dial menu function is set to "REC RUN" or "FREE RUN."
- Once the setting mode is entered for item No. 2008, 7010 or 7011, operation cannot be returned to the setting mode of any other item. When the SEARCH (SET) button is pressed upon completion of the setting, the change made to the previous setting for the item will be entered. On the other hand, when the DIAL MODE switch is set to SEARCH without pressing the SEARCH (SET) button first, all the settings including the one which was made previously will be canceled.



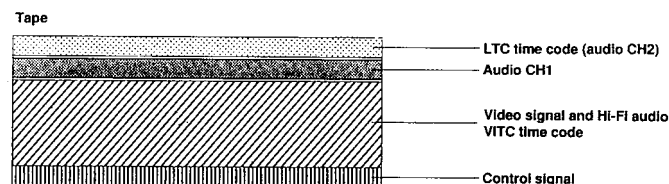
# Time Code/user's bit

## Time code

The "time code," which is based on the time code signal generated by the time code signal generator, recorded on tape, and read out by the time code signal reader, is used to display absolute positions on the tape in units of "hours:minutes:seconds:frames." Knowing an absolute position makes it possible to conduct editing accurately and search operations speedily.

There are two types of time codes: LTC (longitudinal time code) and VITC (vertical interval time code). The LTC is recorded on the tape's normal audio CH2 track. It is used to record the position information on the tape and user's bit information.

The VITC is recorded in the vertical blanking period of the video signals so that even without using the normal audio CH2 track, it is used to record the information regarding position on the tape and user's bit information.



The time code itself is indicated on the display and superimpose on the TV monitor.

LTCR 00:07:04:24  
Time code mode Hours Minutes Seconds Frames

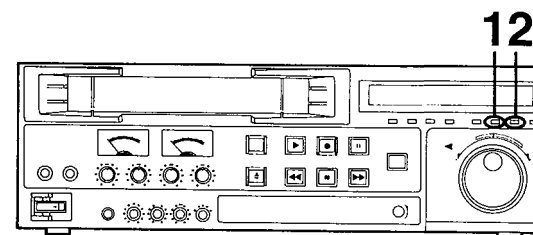
## User's bit

Among the time code signals, the "user's bit" is an information released to the user. It is used to record the operator number or real time.

LUBR AB CD EF 88

A total of 16 characters—numbers 0 to 9, A, B, C, D, E and F—can be used for the user's bit. (The characters "B" and "D" are displayed in small letters in the counter display.)

# Setting the time code switches



## 1. Setting the CTL/TC/UB button

This selects the time code mode which is indicated on the display.

CTL: The CTL (control) signal value is indicated.  
TC: The time code value is indicated.  
UB: The user's bit value is indicated.

CTL/TC/UB

## 2. Setting the LTC/AUTO/VITC button

This selects the read out mode of the time code.

LTC: The LTC time code signal recorded on linear track CH2 is read out.  
AUTO: Priority is given to reading out the VITC signal when in the slow mode, and to reading out the LTC signal at all other times.  
VITC: Only the VITC signal is read out.

LTC/AUTO/VITC

- Interpolation is provided by the CTL signal when it is no longer possible to read out the time code signal in any of the modes.

## 3. Settings with the dial menu functions

The time code set-up can be performed using dial menu function item No. 7001 to 7009. (See pages 46, 47.)

The preset values for the time code and user's bit can be set using dial menu function item No. 7010 and 7011.



## Recording the time code/user's bit

### 1. Recording the optional (preset) time code/user's bit

- [1] Set the "TC INT/EXT SELECT" (Item No. 7001) dial menu function to "INT." (See page 46.)
- [2] Set the "TC MODE" (Item No. 7002) dial menu function to "REC RUN." (See page 46.)
- [3] Set the preset value using dial menu function item No. 7010 or No. 7011. (See page 47.)
- Set the "AUDIO CH2" (Item No. 3006) dial menu function to "OFF" when the LTC time code is not to be recorded. (See page 42.)
  - Set the "VITC REC" (Item No. 7003) dial menu function to "OFF" when the LTC time code is not to be recorded. (See page 46.)

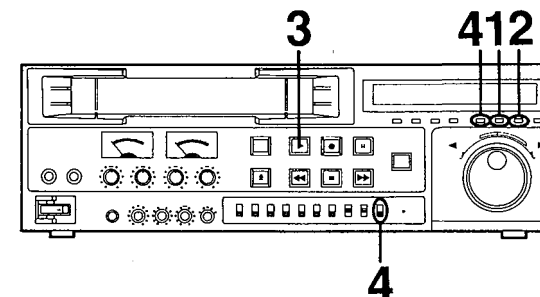
### 2. Recording the continuous time code on the editing tape

- [1] Set the "TC INT/EXT SELECT" (Item No. 7001) dial menu function to "INT." (See page 46.)
- [2] Set the "TC MODE" (Item No. 7002) dial menu function to "REGEN." (See page 46.)
- Set the "AUDIO CH2" (Item No. 3006) dial menu function to "AUDIO" when the LTC time code is not to be recorded. (See page 42.)
  - Set the "VITC REC" (Item No. 7003) dial menu function to "OFF" when the VITC time code is not to be recorded. (See page 46.)

### 3. Dubbing the LTC signal recorded on the tape (Dubbing the LTC signal with the settings below prevents deterioration in the LTC time code signal.)

- [1] Set to "LTC" mode with the LTC/AUTO/VITC button. (See page 49.)
- [2] Set to "TC" mode with the CTL/TC/UB button. (See page 49.)
- [3] Set the "TC MODE" (Item No. 7002) dial menu function to "REGEN." (See page 46.)
- [4] Set the "TC OUT SIGNAL REGEN" (Item No. 7008) dial menu function to "REGEN." (See page 46.)

## Playing back the time code/user's bit



### 1. Set to TC or UB mode with the CTL/TC/UB button.

TC: For time code playback.  
UB: For user's bit playback.



### 2. Set the LTC/AUTO/VITC button.

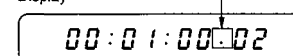
LTC: The LTC time code signal recorded on linear track CH2 is read out.  
AUTO: Priority is given to reading out the VITC signal when in the slow mode, and to reading out the LTC signal at all other times.  
VITC: Only the VITC signal is read out.



- Interpolation is provided by the CTL signal when it is no longer possible to read out the time code signal in any of the modes.

### 3. Press the PLAY button.

Display



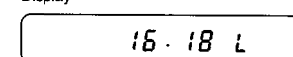
- ☐ (Drop frame)  
☐ (Non-drop frame)  
☐ Interpolation by CTL signal



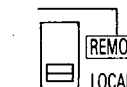
### 4. To check the VITC insertion lines during playing back.

Set the CONTROL Switch to "REMOTE" and press the RESET button.

Display



(When VITC is inserted in line 16 and 18.)



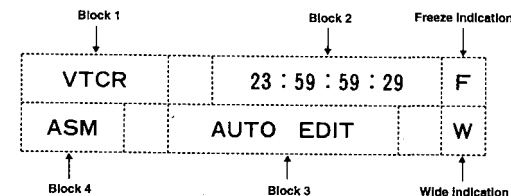
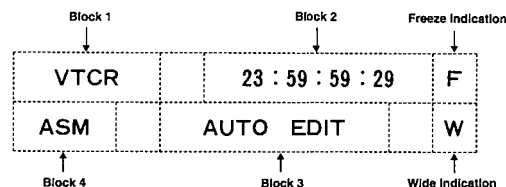
CONTROL





# Superimpose screen

When the ON SCREEN switch in the front pocket is set to ON, the superimpose signal listed below are added to the signals output from the VIDEO MONITOR connector.  
The superimpose display does not appear in the dial menu mode.



## Block 1

The time code modes are abbreviated on the display using the following characters.

CTL: Control signal  
TCG: Time code generator value  
LTCR: Playback value of LTC time code  
VTCR: Playback value of VITC time code  
ETCG: External time code generator value  
LUBG: Generator value of LTC user's bit  
VUBG: Generator value of VITC user's bit  
LUBR: Playback value of LTC user's bit  
VUBR: Playback value of VITC user's bit  
EUBG: Generator value of external user's bit

## Block 2

The time code value is indicated in hours, minutes, seconds and frames, each with 2 digits.  
(In the UB mode, no colon is displayed.)

12:34:43:21

[:] = Non-drop frame mode  
[.] = Drop frame mode  
[] = Time code reading disabled

## Block 3

The VTR operating modes are indicated as below.

EJECT (eject)	EDIT (editing)
PLAY (playback)	EPLY (edit play)
REC (recording)	READY-OFF (ready mode release)
STOP (stop)	
FF (fast forward)	
REW (rewind)	
STILL (pause)	

## Block 3 (cont.)

The search is also displayed.

JOG XXXXX (jog)  
SHTL XXXXX (shuttle)

"xxxxx" denotes the search speed.

—1/25 Tape speed (in this case, search proceeds in the reverse direction at 1/25x normal playback speed)

↑ Forward direction / ↓ reverse direction

## Block 4

The edit modes are indicated as follows.

ASM (Assemble)  
V12 (Insert): VIDEO, AUDIO-CH1, AUDIO-CH2

## NOTE

- The block 3, 4 displays and wide indication appears only when the "STATUS SUPER" dial menu function (item No. 4004) is set to ON.

## REFERENCE

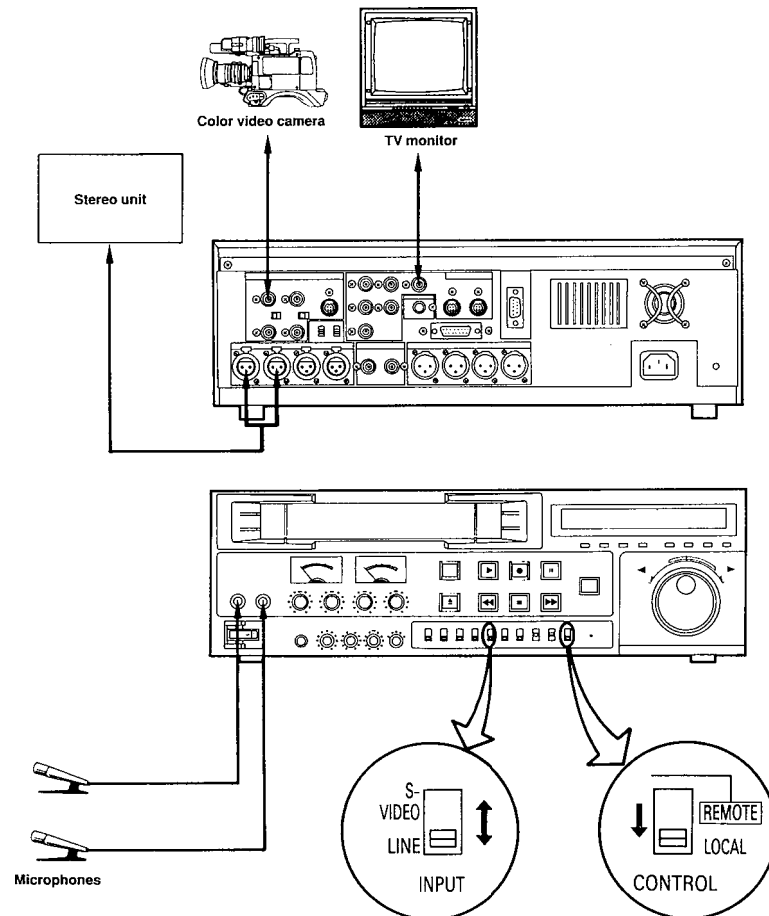
- The superimpose display characters can be changed using the dial menu function (item No. 4001). (See page 43.)
- The superimpose display position can be moved using the dial menu function (item No. 4002, 4003). (See page 43.)



## Connections for basic system

These connections are for editing using one S-VHS VTR.

- Set the CONTROL switch to LOCAL.
- Set the "SYNC" (item No. 1001) dial menu function to "NORM".
- Set the "AUDIO CH2" (item No. 3006) dial menu function to "AUDIO". (Set to LTC for editing with the LTC time code signal.)



## Dubbing connections

These connections are for editing using two S-VHS VTRs.

The ways to prevent deterioration in the picture quality caused by the dubbing connections are ranked as follows in terms of their effectiveness.

1. Use of S-VIDEO cable
  2. Use of BNC cable
- Set the CONTROL switch to LOCAL.
  - Set the "AUDIO CH2" (item No. 3006) dial menu function to "AUDIO". (Set this to "TIME CODE" when dubbing LTC time code signals.)
  - Set the "IMAGE MODE SELECT" (item No. 2001) dial menu function to "EDIT".

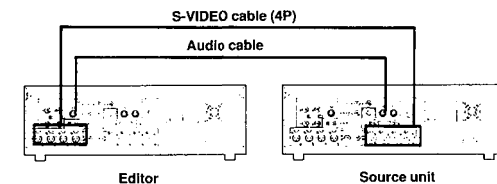
### 1. Connections using S-VIDEO cable (4P)

#### Main setting (source unit)

- Dial menu function "SYNC" (item No. 1001) to "NORMAL"
- Dial menu function "IMAGE" (item No. 2001) to "EDIT"

#### Main setting (editor)

- INPUT switch to "S-VIDEO"
- Dial menu function "SYNC" (item No. 1001) to "NORMAL"
- Dial menu function "IMAGE MODE SELECT" (item No. 2001) to "EDIT"



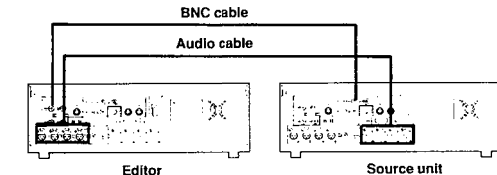
### 2. Connections using BNC cable.

#### Main setting (source unit)

- Dial menu function "SYNC" (item No. 1001) to "NORMAL"
- Dial menu function "IMAGE MODE SELECT" (item No. 2001) to "EDIT"

#### Main setting (editor)

- INPUT switch to "LINE"
- Dial menu function "SYNC" (item No. 1001) to "NORMAL"
- Dial menu function "IMAGE MODE SELECT" (item No. 2001) to "EDIT"

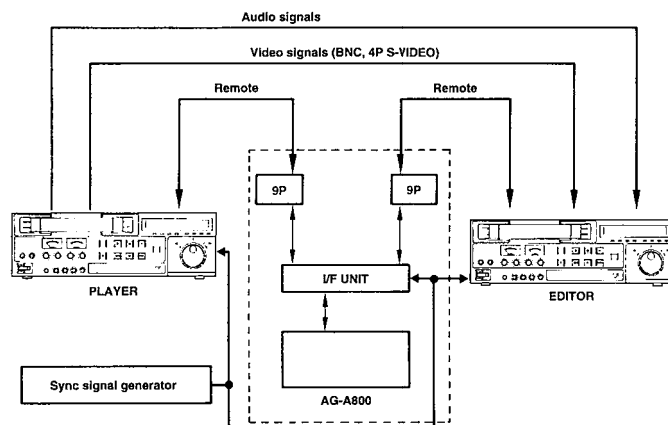




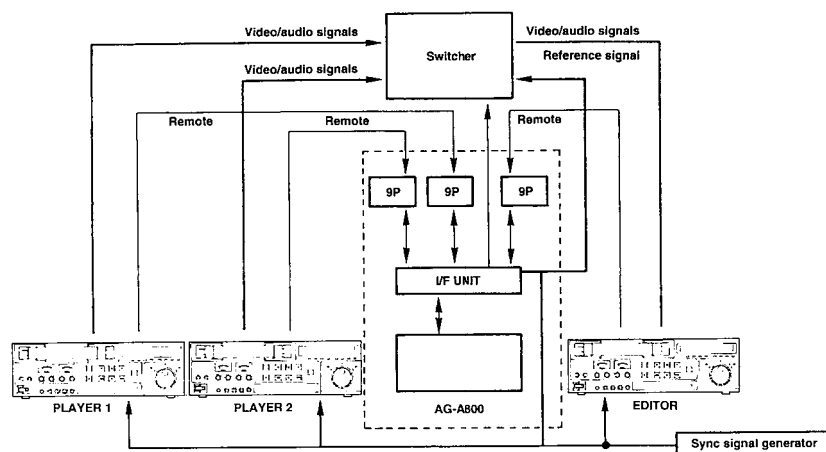
# System using 9P editing controller

Editing at a high degree of accuracy and with almost no editing errors can be done by installing the AG-F700 (optional accessory) in this unit and using the 9P editing controller (optional accessory) to conduct time code editing. This unit contains its own time base corrector (TBC) and so obviates the need for time-consuming TBC wiring during system editing.

## System composed of one editor and one player



## System composed of one editor and two players (enabling AB roll editing)



### 1. Connect the editing controller

- Connect it to be REMOTE (9P) connector.
- Connect the audio signals.
- Connect the video signals.
- Connect the REF signals.

### 2. Set 9P DEVICE TYPE SELECT (item No. 5002).

Use the dial menu function to set this.

OTHER TYPES (set-up No. 00): When using a controller not made by Panasonic  
S-VHS ID (set-up No. 01): When using a controller made by Panasonic

### 3. Set the CONTROL switch to REMOTE.

### 4. Operate the unit from the editing controller.

For details on how to operate the editing controller, reference should be made to the Instruction Manual accompanying the controller.

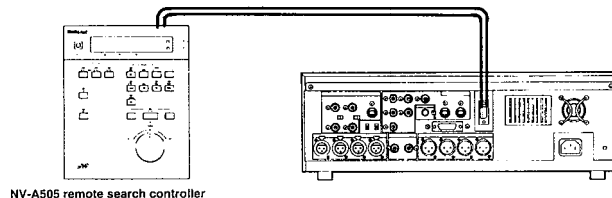
## NOTES

- Set the editing timing for the 9P editing controller to 8 frames.
- When using an editing controller provided with a color framing function, do not set the color framing mode.
- Although, for insert editing using the 9P editing system, it is possible to set the editing channels independently for the time code singls and audio signals, this particular unit uses linear track CH2 for both the time code (LTC) and normal audio CH2. For this reason, the "AUDIO CH2" dial menu function (item No. 3006) must be set properly in accordance with the signals which are to be edited.
- For time code editing, set the "TC INT/EXT SELECT" dial menu function (item No. 7001) to "INT".
- When the 9P editing system is used, the "9P FF/REW MODE" dial menu function (item No. 5003) can be used to select full loading FF/REW and unloading FF/REW.
- Set the dial menu function (item No. 1003) "TAPE PROTECTION" to "AUTO ADVANCE" only when editing lengthy scenes during AB roll editing.
- Set the DIGITAL SLOW switch to "OFF" or "1" to perform editing using synchronization.



## System using remote search controller

In the 34-pin remote connector (option) is installed and the NV-A505 remote search controller (option) is connected, the unit can be operated from a distance.



### 1. Connect the NV-A505 remote search controller to the REMOTE (34-pin) connector.

### 2. Set the 34P SHTL MAX SPEED (item No. 5004).

Use the dial menu function to set the maximum shuttle search speed which can be operated by the editing controller being used.

10 (set-up No. 00): 10x normal tape speed  
20 (set-up No. 01): 20x normal tape speed

### 3. Set 34P CONTROLLER TYPE (item No. 5005).

Use the dial menu function to set the type of editing controller being used.

TYPE-1 (set-up No. 00): AG-A800, AG-A770, AG-A750  
TYPE-2 (set-up No. 01): AG-A650, NV-A500, NV-A505

### 4. Set the CONTROL switch to REMOTE.

This disables the operation of all the unit's control buttons except STOP and EJECT.

### 5. Operate the NV-A505 remote search controller.

The NV-A505 can be used to control the following:

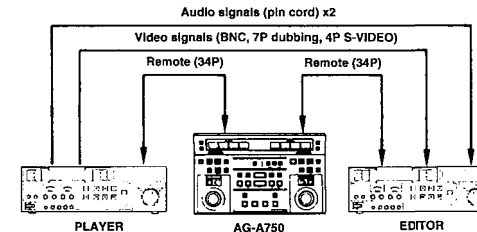
- Assemble editing, insert editing
- Recording, playback
- Fast forwarding, rewinding, stop and pause
- 9-mode variable speed (0 to 10x or 20x) search playback (but not jog)

## REFERENCE

- The remote search controller can be used as an interface when configuring a system in which two or three source units are connected simultaneously.
- The AG-A600 remote controller can also be used.

## System using 34P editing controller

It is possible to use the editing controller to operate the unit and edit material with a high degree of accuracy by installing the 34-pin remote connector (option) and connecting the optional 34P editing controller to the unit.



### 1. Connect the editing controller

- Connect it to the REMOTE (34P) connector.
- Connect the audio signals.
- Connect the video signals.

### 2. Set the 34P SHTL MAX SPEED (item No. 5004).

Use the dial menu function to set the maximum shuttle search speed which can be set by the editing controller being used.

10 (set-up No. 00): 10x normal tape speed  
20 (set-up No. 01): 20x normal tape speed

### 3. Set 34P CONTROLLER TYPE (item No. 5005).

Use the dial menu function to set the type of editing controller to be used.

TYPE-1 (set-up No. 00): AG-A800, AG-A770, AG-A750  
TYPE-2 (set-up No. 01): AG-A650, NV-A500, NV-A505

### 4. Set the CONTROL switch to REMOTE.

### 5. Operate the unit from the editing controller.

For details on how to operate the editing controller, reference should be made to the Instruction Manual accompanying the controller.

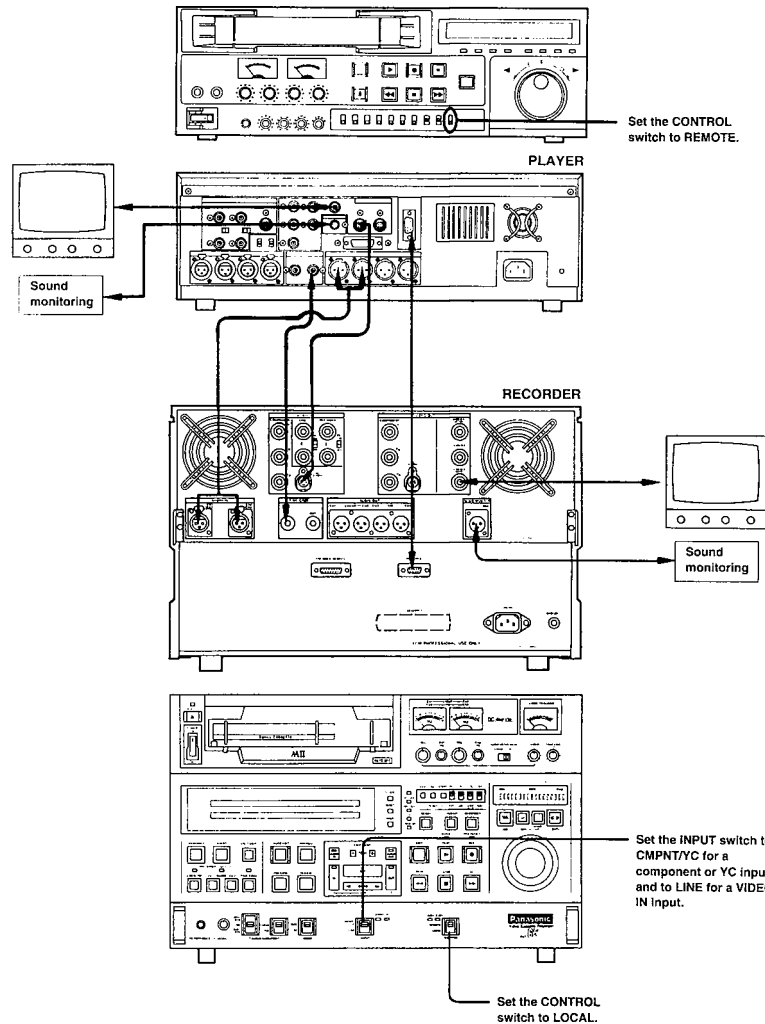
## NOTES

- Use the DIGITAL SLOW switch on the editor at the "OFF" position. The editing accuracy will be impaired if the switch is used at "ON."
- When using the AG-7750 or AG-7650 as the source unit, set the "PLAY DELAY" (item No. 6004) dial menu function on the editor to "1 FRAME."
- When the NV-A500 editing controller is used, preview may not be terminated even when the EDIT STOP button is pressed. In cases like this, press the PAUSE button.
- When the AG-A800 editing controller is used in a 34P system, the tape may advance with the READY ON/OFF operation but this has no effect on the editing accuracy.
- When the AG-A800 editing controller is used in a 34P system, use it in the STOP EE mode. In the STOP PB mode, preview operations during assembly editing cannot be conducted.
- Set the editor's MEMORY switch to "EDIT" and the player's MEMORY switch to "PLAY."



# System using MII unit

This unit comes with an RS-422A interface facility which enables it to be connected with a professional/industrial MII VTR.



- The above system employs the model AU-65 MII VTR designed for commercial applications.

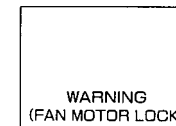
# Error displays

When an error appears on the counter display, it means that a malfunction has occurred in the unit. When this happens, terminate operation without delay and remedy the trouble by following the instructions in the Instruction Manual.

Error display	Problem	Remedy
<i>d</i>	Condensation	Leave power on and wait until error display is cleared (see MEMO below).
<i>E - 0</i> *	Malfunction in fan motor section	Turn off the power and switch it back on again, and check that the unit operates normally.
<i>E - 2</i>	Malfunction in elevator section	This occurs when the cassette has not been inserted properly. Turn off the power and switch it back on again, and check that the unit operates normally.
<i>E - 3</i>	Malfunction in loading section	
<i>E - 4</i>	Malfunction in cylinder section	This occurs when a heavy load is applied because condensation has formed on the tape or for some other reason. Turn off the power and switch it back on again, and check that the unit operates normally.
<i>E - 5</i>	Malfunction in reel section	
<i>E - 6</i>	Malfunction in tension section	
<i>E - 7</i>	Malfunction in solenoid section	Turn off the power and switch it back on again, and check that the unit operates normally.

- Contact your authorized dealer if the unit does not function normally when the above remedial action has been taken.

## \*Fan motor error display



When trouble occurs in the fan motor area, the warning display shown on the left is output to the monitor screen alternately with the regular counter display. Since the unit's power will be automatically turned off about 20 minutes after this warning is output, complete the work speedily and turn off the power. The power can be switched back on in about 20 minutes' time.

## MEMO

### Condensation

This phenomenon is caused by the same principle under which droplets of moisture (condensation) form on a window in a heated room when it is cold outside. It can occur when the unit or a tape is moved to a location with a significantly different temperature or humidity. It also occurs:

- When the unit or tape is moved to a location full of steam which cannot escape or a location with a high humidity, or immediately after movement to a heated room
- When the unit or tape is moved quickly from a cold or cooled location to a high-temperature and/or high-humidity location

**SHOULD A MALFUNCTION OCCUR, TURN OFF THE POWER IMMEDIATELY, TAKE HOLD OF THE POWER PLUG AND DISCONNECT IT FROM THE POWER SOCKET AND CONTACT YOUR DEALER. CONTINUED USE MAY CAUSE FURTHER DETERIORATION OR LEAD TO AN ACCIDENT.**



## Servo reference

This unit automatically selects the input video signal selected by the INPUT switch, the REF VIDEO signal supplied from the REF IN connector or the internal sync signal (INT) as the servo reference signal.]

The relationship between the "SYNC" dial menu function (item No. 1001) and servo reference signal during normal playback and recording is as described below.

### ■ During playback or search

SYNC SELECT switch position	Input signal mode		Reference signal
	VIDEO IN signal	REF IN signal	
NORM	○	○	REF IN signal
	○	×	INT sync signal
	×	○	REF IN signal
	×	×	INT sync signal
EXT	○	○	REF IN signal
	○	×	INT sync signal
	×	○	REF IN signal
	×	×	INT sync signal

### ■ During editing or recording

SYNC SELECT switch position	Input signal mode		Reference signal
	VIDEO IN signal	REF IN signal	
NORM	○	○	VIDEO IN signal
	○	×	VIDEO IN signal
	×	○	REF IN signal
	×	×	INT sync signal
EXT	○	○	REF IN signal
	○	×	INT sync signal
	×	○	REF IN signal
	×	×	INT sync signal

"O": signal is supplied; "X": signal is not supplied.

## Connector signals

### REMOTE 9P connector

Pin no.	Description of signal
1	GND
2	TRANSMIT A
3	RECEIVE B
4	RECEIVE COMMON
5	SPARE
6	TRANSMIT COMMON
7	TRANSMIT B
8	RECEIVE A
9	GND

### S-VIDEO IN/OUT connectors (4P)

Pin no.	Description of signal
1	Y GND
2	C GND
3	Y signal
4	C signal

### TBC REMOTE connector (15P)

Pin no.	Description of signal
1	
2	SET UP
3	C LEVEL
4	GND
5	+ 12 V
6	SYSTEM HΦ
7	SYS. SC COARSE (2)
8	- 12 V
9	HUE
10	VIDEO LEVEL
11	RET GND
12	
13	
14	SYS. SC FINE
15	SYS. SC COARSE (1)

### AUDIO IN/OUT connectors (XLR)

Pin no.	Description of signal
1	GND
2	HOT
3	COLD

### REMOTE 34P connector (option)

Pin no.	Description of signal
1	REC SWITCH*1
2	PLAY SWITCH*1
3	FF SWITCH*1
4	REW SWITCH*1
5	STOP SWITCH*1
6	
7	PAUSE SWITCH*1
8	CASSETTE IN SWITCH*2
9	CUT IN SWITCH*1
10	
11	SERVO LOCK*2
12	GND
13	SWITCH STEP*1
14	REVERSE COUNT*2
15	CUT OUT SWITCH*1
16	EDIT SWITCH*1
17	REVERSE IN*2
18	CONTROL PULSE OUT
19	REMOTE 19*1
20	START MARK
21	EJECT SWITCH*1
22	INSERT CH1*1
23	REC HOLD*2
24	PLAY HOLD*2
25	FF HOLD*2
26	REW HOLD*2
27	INSERT CH2*1
28	
29	PAUSE HOLD*2
30	REMOTE 30*1
31	CUT IN HOLD*2
32	INSERT VIDEO*1
33	REMOTE 33*1
34	+ 12 V

\*1 Active low (INPUT)

\*2 Open collector, active low (OUTPUT)



# SECTION 2

## DISASSEMBLY PROCEDURES

### CONTENTS

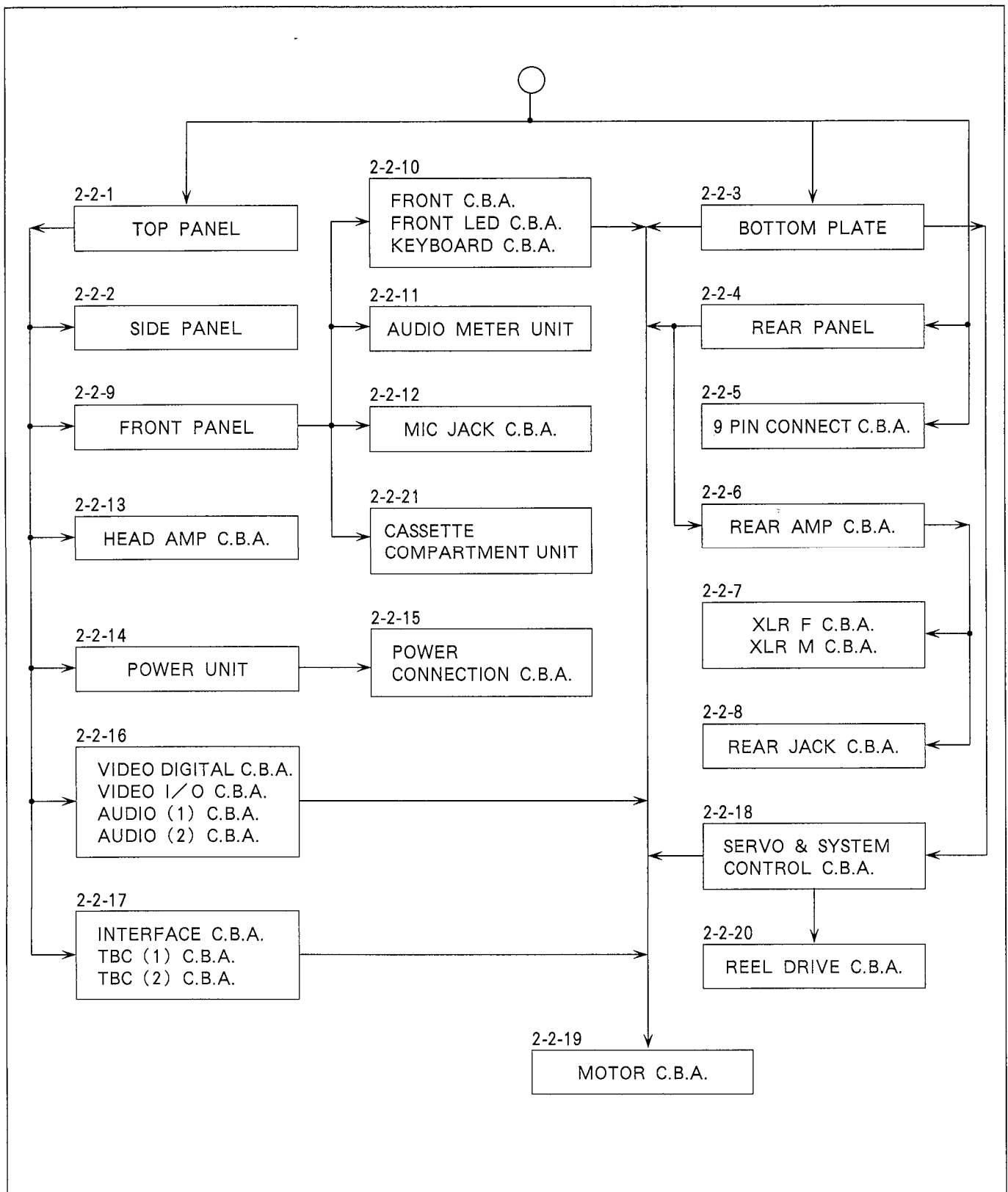
<b>2-1. DISASSEMBLY FLOW CHART .....</b>	<b>2-2</b>
<b>2-2. DETAILED DISASSEMBLY METHOD .....</b>	<b>2-3</b>
2-2-1. Removal of the Top Panel .....	2-3
2-2-2. Removal of the Side Panels .....	2-3
2-2-3. Removal of the Bottom Plate .....	2-3
2-2-4. Removal of the Rear Panel .....	2-3
2-2-5. Removal of the 9 Pin Connect C.B.A. ....	2-4
2-2-6. Removal of the Rear Amp C.B.A. ....	2-4
2-2-7. Removal of the XLR F C.B.A. and XLR M C.B.A. ....	2-4
2-2-8. Removal of the Rear Jack C.B.A. ....	2-4
2-2-9. Removal of the Front Panel .....	2-5
2-2-10. Removal of the Front, Front LED and Keyboard C.B.A. ....	2-5
2-2-11. Removal of the Audio Meter Unit .....	2-6
2-2-12. Removal of the MIC Jack C.B.A. ....	2-6
2-2-13. Removal of the Head Amp C.B.A. ....	2-6
2-2-14. Removal of the Power Unit .....	2-6
2-2-15. Removal of the Power Connection C.B.A. ....	2-6
2-2-16. Removal of the Video Digital, Video I/O, Audio (1), Audio (2) C.B.A. ....	2-7
2-2-17. Removal of the Interface, TBC (1), TBC (2) C.B.A. ....	2-7
2-2-18. Removal of the Servo & System Control C.B.A. ....	2-7
2-2-19. Removal of the Mother C.B.A. ....	2-8
2-2-20. Removal of the Reel Drive C.B.A. ....	2-8
2-2-21. Removal of the Cassette Compartment .....	2-8
<b>2-3. SCREWS .....</b>	<b>2-9</b>



## 2-1. DISASSEMBLY FLOWCHART

2

DISASSEMBLY





## 2-2. DETAILED DISASSEMBLY METHOD

### 2-2-1. Removal of the Top Panel

1. Unscrew the 2 screws (A) on the Top Panel (Figure D2).
2. Carefully lift the rear of the case and side it off the back of the unit.

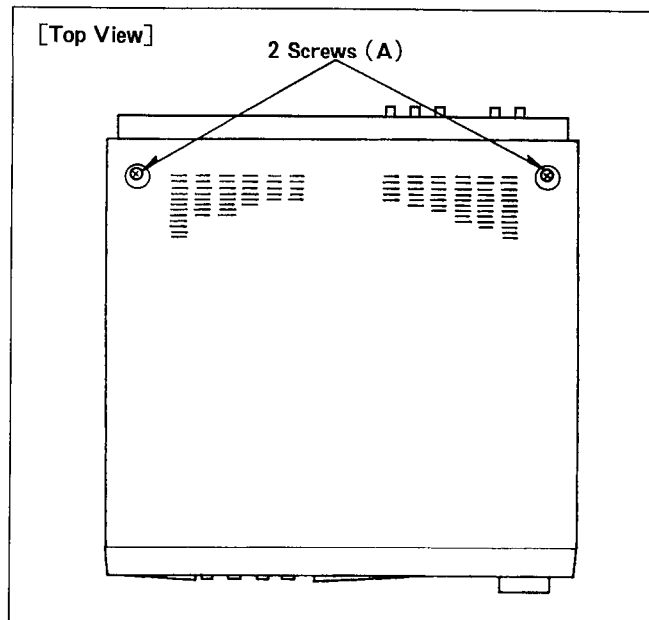


Figure D2

### 2-2-2. Removal of the Side Panels

1. Unscrew the 8 screws (B) on the Side Panels. (Figure D3)
2. Lift the Side Panels.

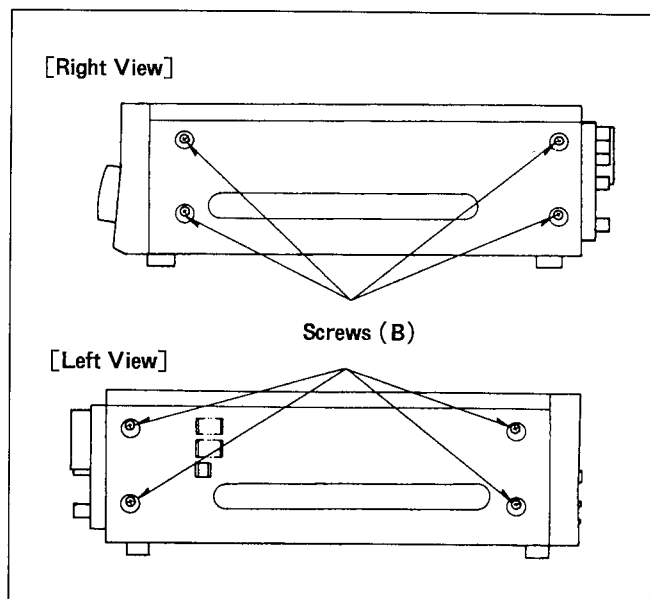


Figure D3

### 2-2-3. Removal of the Bottom Plate

1. Unscrew the 9 screws (C-1) and 3 screws (C-2). (Figure D4)
2. Lift the Bottom Plate.

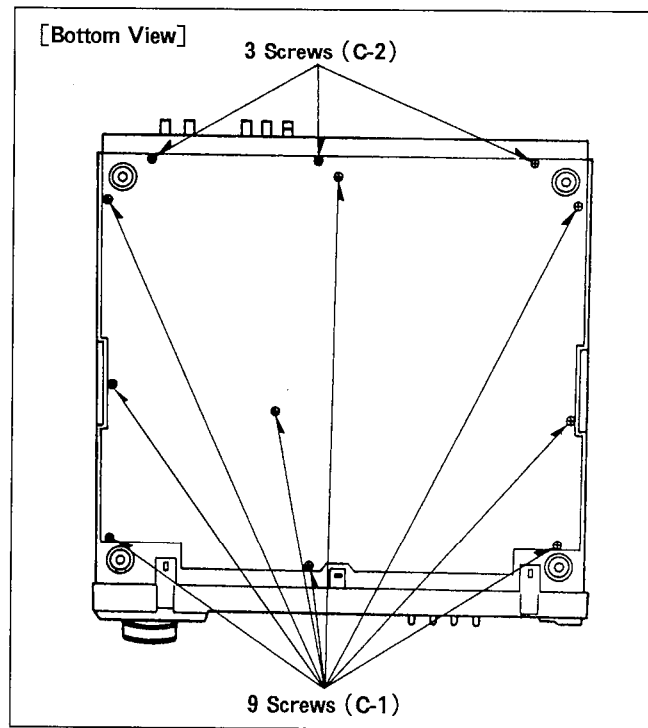


Figure D4

### 2-2-4. Removal of the Rear Panel

1. Unscrew the 6 screws (D) on the Rear Panel. (Figure D5)
2. Lift the Rear Panel and carefully pull the panel off the unit (with taking care for the connection to the Mother C.B.A.).

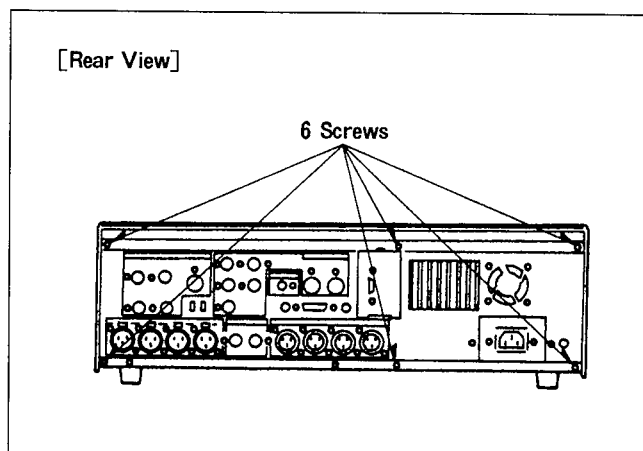


Figure D5



### 2-2-5. Removal of the 9 Pin Connect C.B.A.

1. Unscrew a screw (E) on the 9 pin Connect C.B.A. (Figure D6)
2. Lift the 9 Pin Connect C.B.A. and pull out the connector (P69005). (Figure D7)

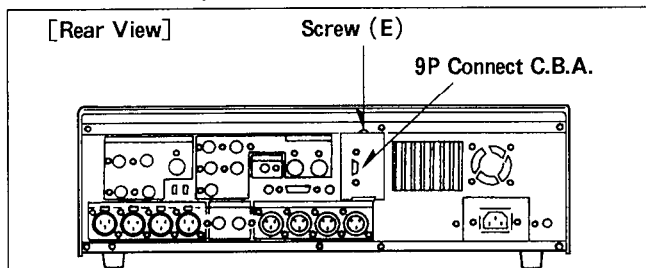


Figure D6

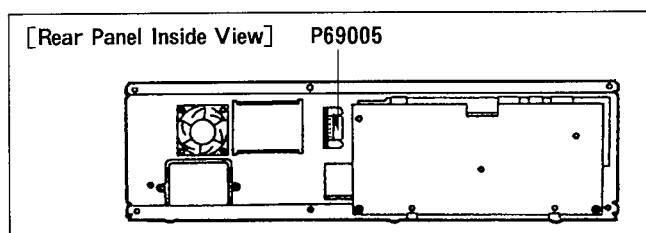


Figure D7

### 2-2-6. Removal of the Rear Amp C.B.A.

1. Unscrew the 2 screws (F) and unlock the 3 locking tabs (a) on the Rear Amp C.B.A. (Figure D8)
2. Lift the Rear Amp C.B.A. and then disconnect the 4 flexible cables (P6601, P6604, P6605 and P6608) and the 3 connectors (P4007, P4008 and P6607). (Figure D9)

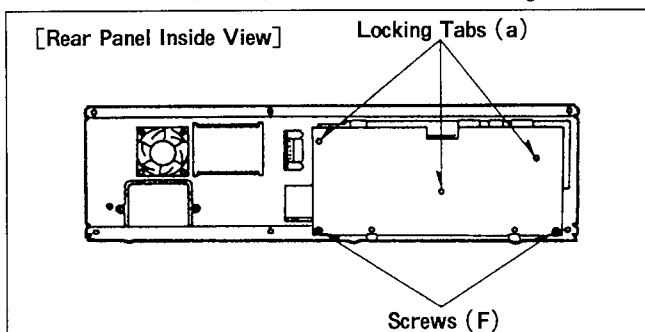


Figure D8

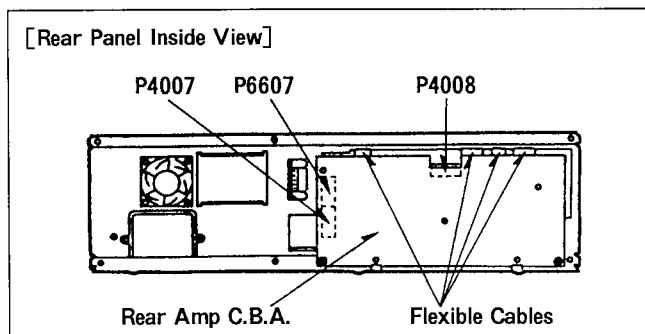


Figure D9

### 2-2-7. Removal of the XLR F C.B.A. and XLR M C.B.A.

1. Unscrew the 8 screws (G-1) and remove the XLR F C.B.A. (Figure D10 and D11)
2. Unscrew the 8 screws (G-2) and remove the XLR M C.B.A. (Figure D10 and D11)

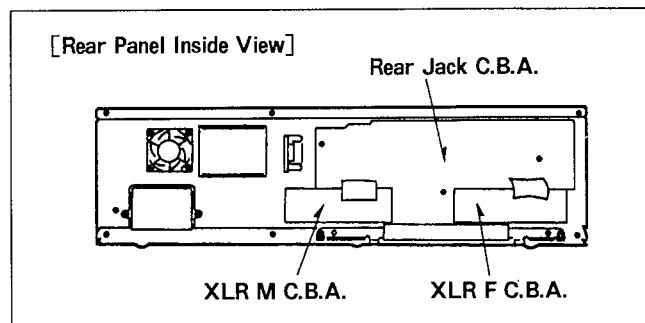


Figure D10

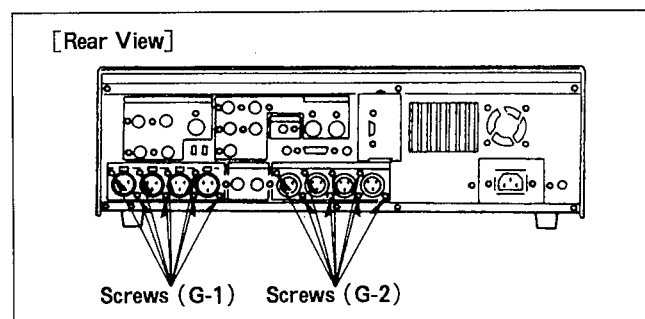


Figure D11

### 2-2-8. Removal of the Rear Jack C.B.A.

1. Unscrew the 14 screws (H-1) and 4 screws (H-2). (Figure D10 And D12)
2. Lift the Rear Jack C.B.A.

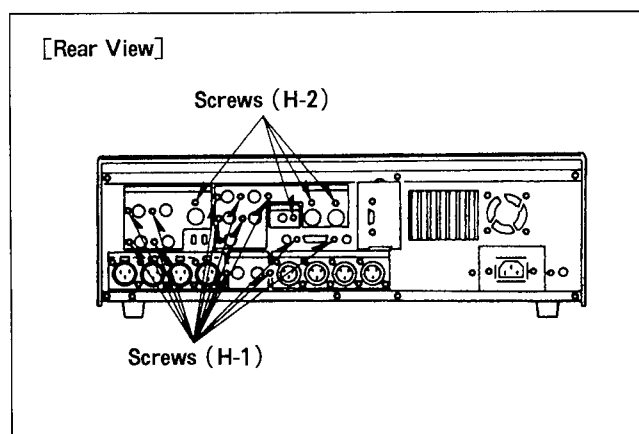


Figure D12



[Front View]

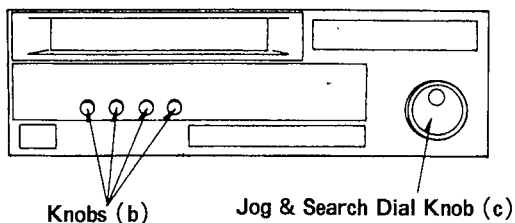


Figure D13

[Top View]

Locking Tabs (d)

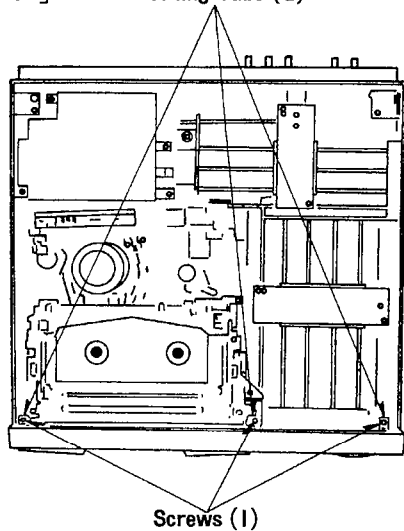


Figure D14

### 2-2-9. Removal of the Front Panel

1. Pull out the 4 Knobs (b) on the Front Panel. (Figure D13)
2. Pull out the Jog & Search Dial Knob (c) on the Front Panel. (Figure D13)
3. Unscrew the 3 screws (I) on the top of the Front Panel and a screw (J) on the bottom of the Front Panel. (Figure D14 and Figure D15)
4. Unlock the 3 locking tabs (d) on the top of the Front Panel and the 2 locking tabs (e) on the bottom of the Front Panel and then remove it. (Figure D14 and D15)

### 2-2-10. Removal of the Front, Front LED and Keyboard C.B.A.

1. Unscrew the 4 screws (K) on the Jog & Search Dial Unit and pull out a connector (P62005). (Figure D16)
2. Lift the Jog & Search Dial Unit.
3. Unscrew the 2 screws (L-1) and pull out the flexible cable (P62501). (Figure D17)
4. Lift the Front LED C.B.A.
5. Unscrew the 4 screws (L-2) and pull out the flexible cable (P62701). (Figure D17)

6. Lift the Keyboard C.B.A.
7. Unscrew a screw (M) and unlock the 3 locking tabs (f) on the Front C.B.A. (Figure D18)
8. Carefully pull the Front C.B.A. off the unit (with taking care for the connection to the Mother C.B.A.) and then disconnect the 2 connectors (P62007 and P62008). (Figure D18)

[Bottom View]

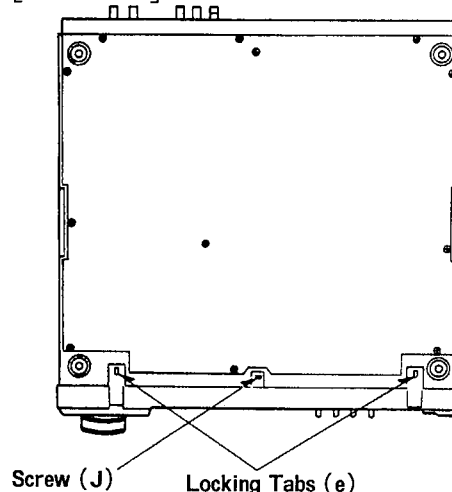


Figure D15

[Front View]

Search Dial Unit

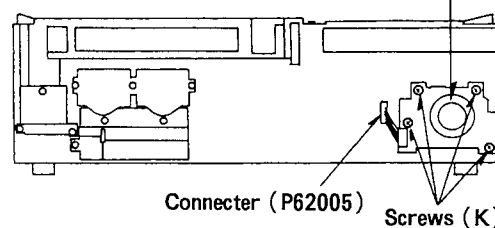


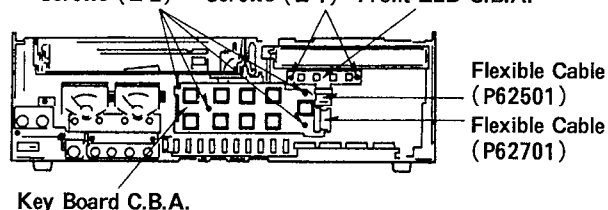
Figure D16

[Front View]

Screws (L-2)

Screws (L-1)

Front LED C.B.A.



Key Board C.B.A.

Figure D17

[Front View]

Locking Tabs (f)

Connector (P62008)

Connector (P62007)

Front C.B.A. Screw (M)

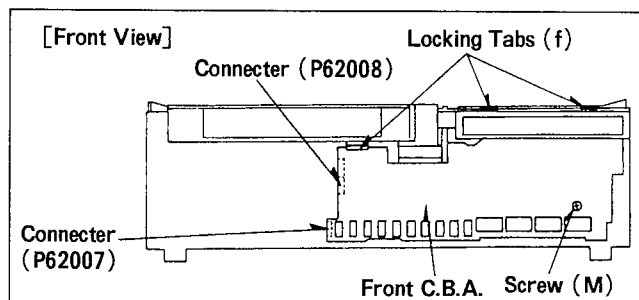


Figure D18



### 2-2-11. Removal of the Audio Meter Unit

1. Unscrew the 6 screws (N) on the Audio Meter Unit. (Figure D19)
2. Lift the Audio Meter Unit.

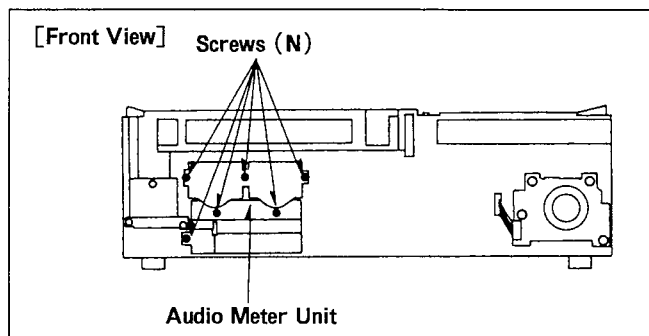


Figure D19

### 2-2-12. Removal of the MIC Jack C.B.A.

1. Unscrew the 3 screws (O) on the MIC Jack C.B.A. (Figure D20)
2. Lift the MIC Jack C.B.A.

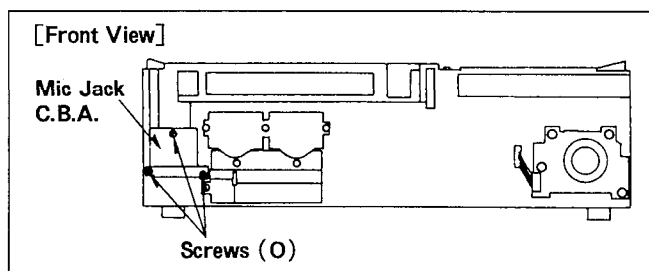


Figure D20

### 2-2-13. Removal of the Head Amp C.B.A.

1. Unscrew the 2 screws (P) on the Head Amp C.B.A. (Figure D21)
2. Carefully Pull out the Head Amp C.B.A.

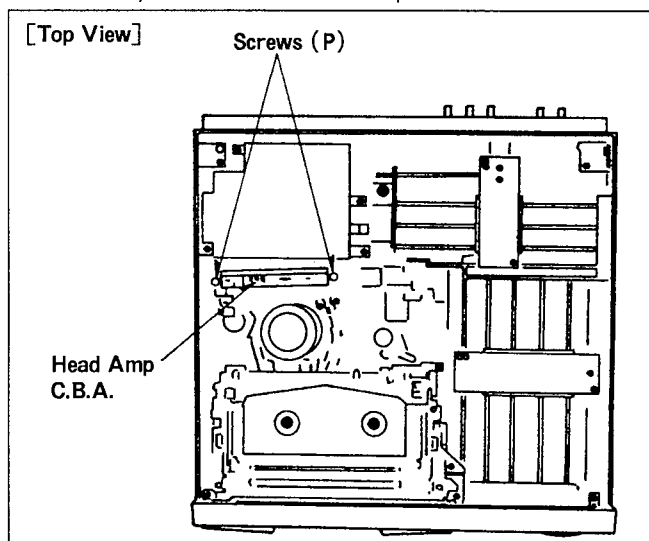


Figure D21

### 2-2-14. Removal of the Power Unit

1. Unscrew the 2 screws (Q) on the Heat Sink (g). (Figure D22)
2. Unscrew the 4 screws (R) on the Power Unit. (Figure D23)
3. Lift the Power Unit and then carefully pull out the 3 connectors (P1001, P1002 and P1003). (Figure D23)

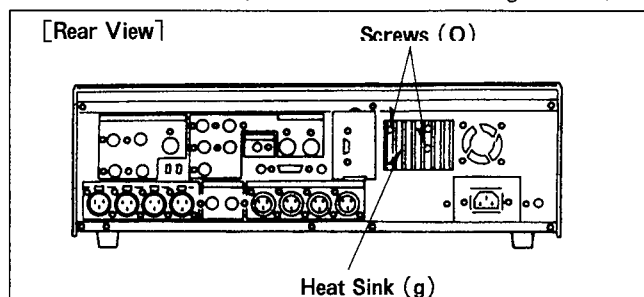


Figure D22

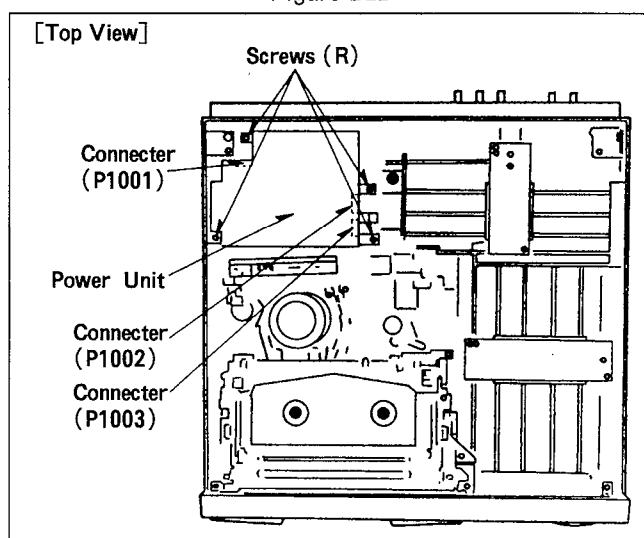


Figure D23

### 2-2-15. Removal of the Power Connection C.B.A.

1. Unscrew the 2 screws (S) on the Rear Panel. (Figure D24)
2. Unscrew the 4 screws (T-1) on the Power Connection C.B.A. and a screw (T-2) on the cabinet. (Figure D25)
3. Carefully lift the Power Connection C.B.A. and then disconnect a connector (P1101). (Figure D25)

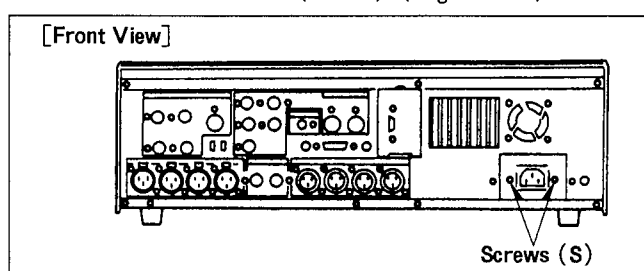


Figure D24



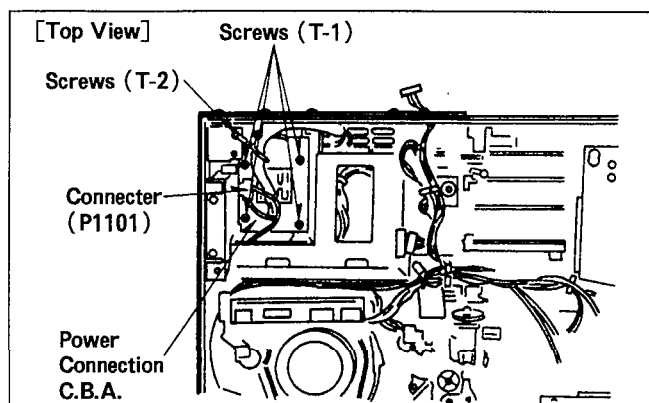


Figure D25

### 2-2-16. Removal of the Video Digital, Video I/O, Audio (1) and Audio (2) C.B.A.

1. Unscrew the 2 screws (U) and remove the C.B. Hold Piece A. (Figure D26)
2. Carefully pull out the Video Digital, Video I/O, Audio (1) and Audio (2) C.B.A. from Mother C.B.A. (Figure D26)

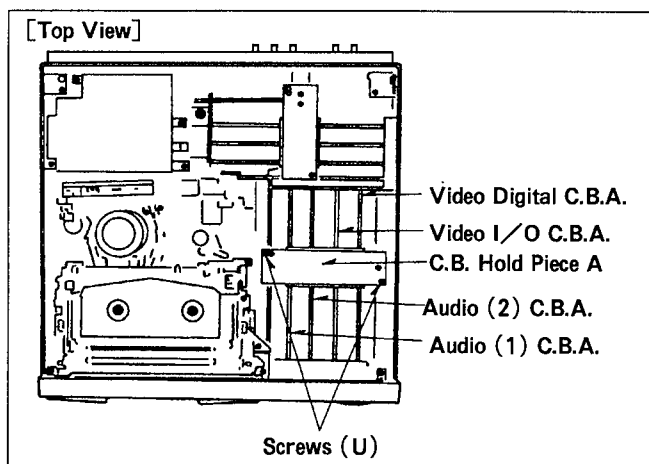


Figure D26

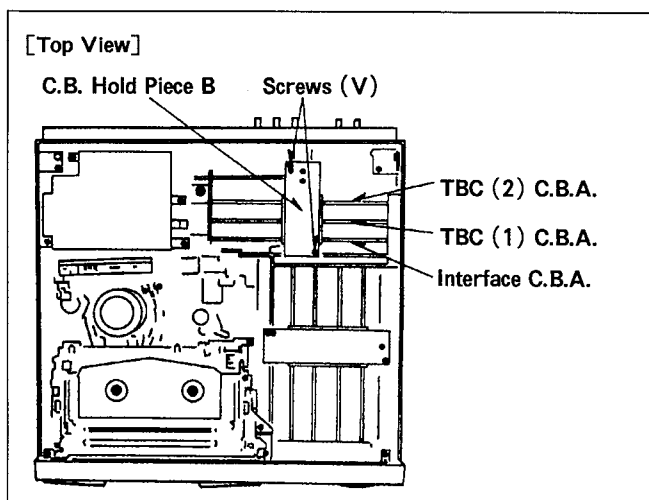


Figure D27

### 2-2-17. Removal of the Interface, TBC (1) and TBC (2) C.B.A.

1. Unscrew the 2 screws (V) and remove the C.B. Hold Piece B. (Figure D27)
2. Carefully pull out the Interface C.B.A., TBC (1) C.B.A. and TBC (2) C.B.A. from Mother C.B.A. (Figure D27)

### 2-2-18. Removal of the Servo & System Control C.B.A.

1. Unscrew the 5 screws (W) on the Servo & System Control C.B.A. (Figure D28)
2. Unlock a locking tab (h) on the Servo & System Control C.B.A. (Figure D28)
3. Open the Servo & System Control C.B.A.
4. Disconnect the 2 flexible cables, the 3 flat cables and the all connectors from the Servo & System Control C.B.A.
5. Carefully lift the Servo & System Control C.B.A. off the unit in the direction indicated by arrow (with taking care for the connection to the Mother C.B.A.). (Figure D29)

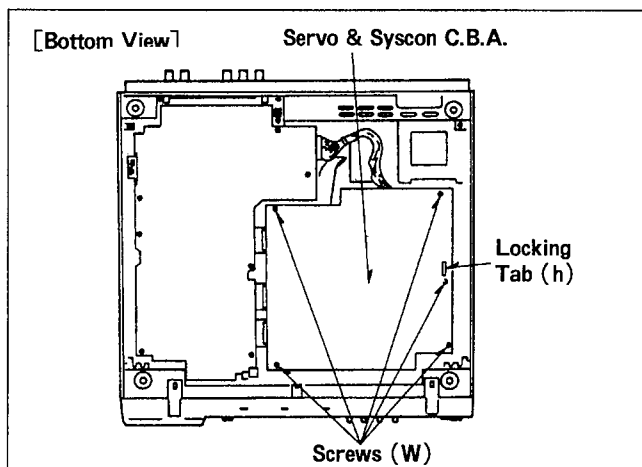


Figure D28

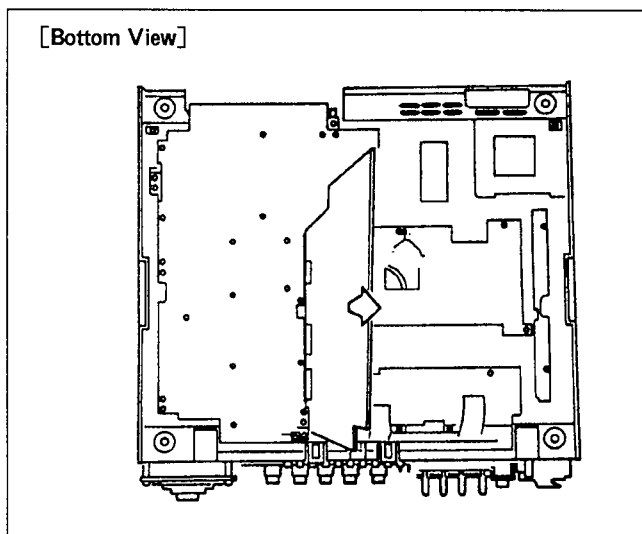


Figure D29



## 2-2-19. Removal of the Mother C.B.A.

\*NOTE: Before removing the Mother C.B.A., be sure to remove the Rear Panel, Front C.B.A., Video Digital C.B.A., Video I/O C.B.A., Audio (1) C.B.A., Audio(2) C.B.A., Interface C.B.A., TBC (1) C.B.A., TBC (2) C.B.A. and Servo & System Control C.B.A.

1. Unscrew the 8 screws (X) on the Mother C.B.A. (Figure D30)
2. Lift the Mother C.B.A. and then disconnect the 2 connectors (P910 and P951). (Figure D30)

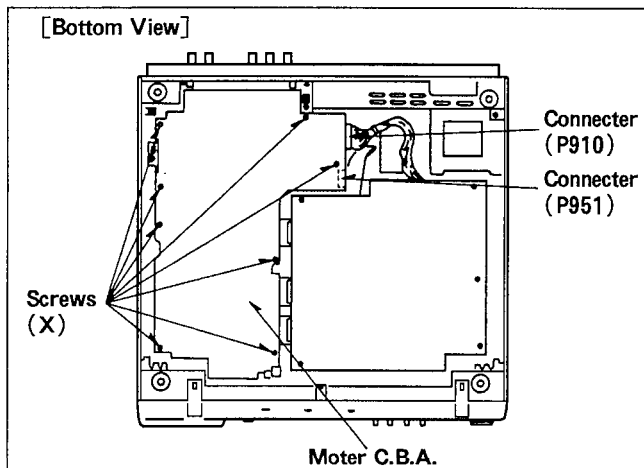


Figure D30

## 2-2-20. Removal of the Reel Drive C.B.A.

1. Unlock the 2 locking tabs (i) on the Reel Drive C.B.A. (Figure D31)
2. Disconnect the 3 Flexible Cables (P2701, P2704 and P2705) and a connector (P2702). (Figure D31)
3. Carefully pull the Reel Drive C.B.A. in the direction indicated by arrow. (Figure D31)

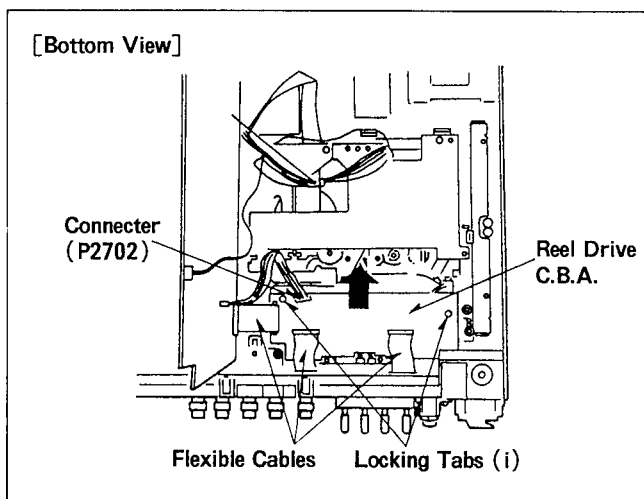


Figure D31

## 2-2-21. Removal of the Cassette Compartment

1. Unscrew the 2 screws (Y-1) and a screw (Y-2). (Figure D32)
2. Disconnect 2 wires and 4 wires from the connector (P1508) on the right side of the Cassette Compartment. (Figure D32)
3. Remove the Top plate.
4. Remove a Cassette Holder Unit. (Figure D33)
5. Unscrew the 4 screws (Z) and remove the Cassette Compartment Unit. (Figure D34)

\*NOTE: When installing the Cassette Compartment Unit, refer to Mechanical Adjustment Procedures.

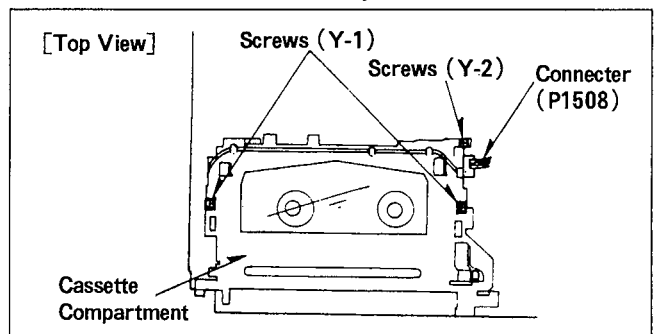


Figure D32

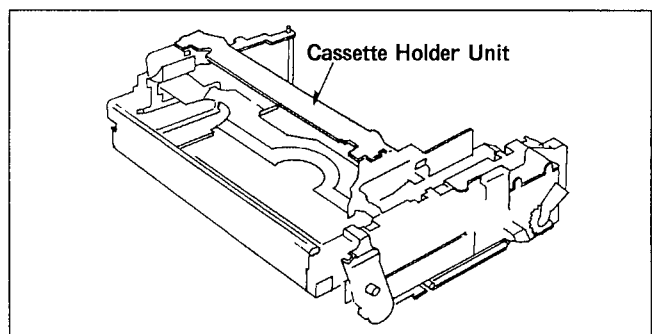


Figure D33

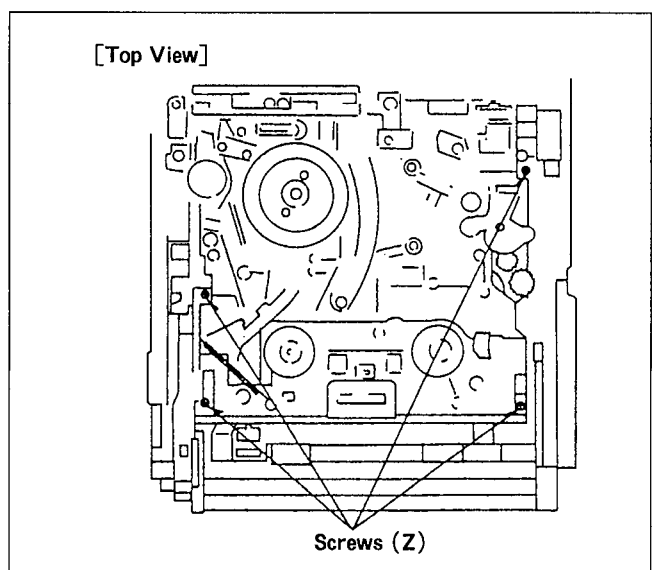
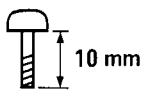
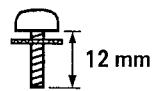
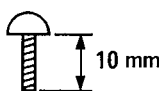
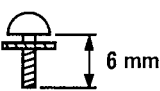
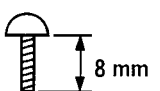
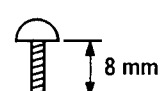
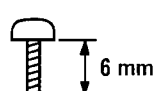
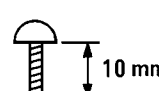
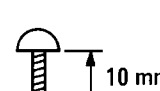

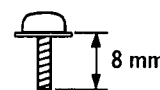
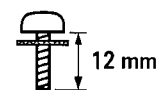
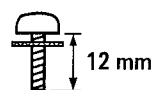
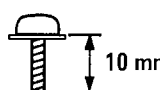
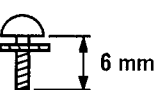
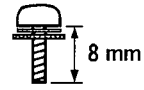
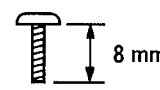
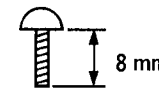
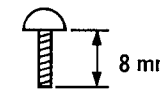


Figure D34



# SCREWS

<p>(A)</p>  <p>VHD0222 (SILVER)</p>	<p>(B)</p>  <p>VHD0426 (SILVER)</p>	<p>(C-1)</p>  <p>VHD0059 (GOLD)</p>	<p>(C-2)</p>  <p>XYE3 + EF6 (GOLD)</p>	<p>(D), (E), (H-1), (H-2)</p>  <p>XTV3 + 8FFZ (BLACK)</p>
<p>(F)</p>  <p>XTV3 + 8FFR (RED)</p>	<p>(G-1), (G-2)</p>  <p>XYN26 + 6FE (BLACK)</p>	<p>(I), (J), (N), (O), (R), (W), (X)</p>  <p>XTV4 + 10JR (RED)</p>	<p>(K), (M)</p>  <p>XTV4 + 10JFR (RED)</p>	<p>(L-1), (L-2)</p>  <p>XYN26 + C5FR (RED)</p>
<p>(P)</p>  <p>XTW3 + 8TR (RED)</p>	<p>(Q)</p>  <p>XYN26 + C12FZ (BLACK)</p>	<p>(S)</p>  <p>XYN3 + F12FZ (BLACK)</p>	<p>(T-1)</p>  <p>XTW3 + 10TFR (RED)</p>	<p>(T-2)</p>  <p>XYE4 + EF6 (GOLD)</p>
<p>(U), (V)</p>  <p>XYN3 + F8R (RED)</p>	<p>(Y-1)</p>  <p>XTB26 + 8G (GOLD)</p>	<p>(Y-2)</p>  <p>XTV3 + 8G (GOLD)</p>	<p>(Z)</p>  <p>XTV26 + 8FR (RED)</p>	



# MEMO

DISASSEMBLY

2



# SECTION 3

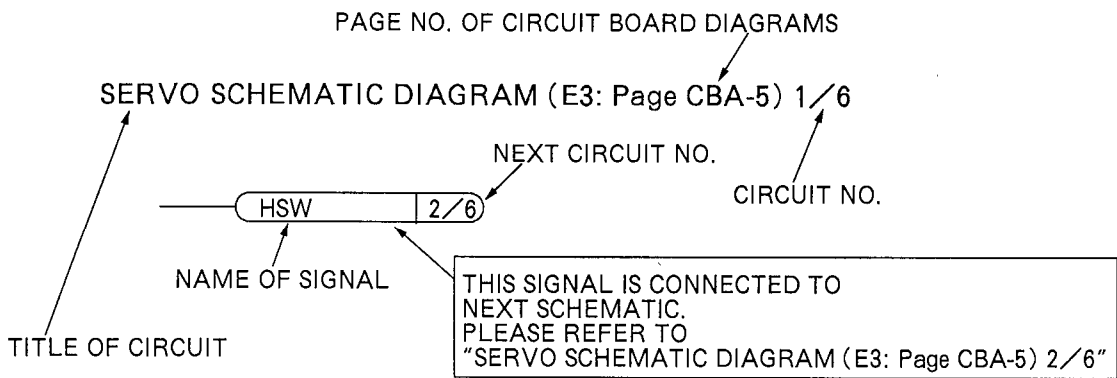
## SCHEMATIC DIAGRAMS

### NOTE

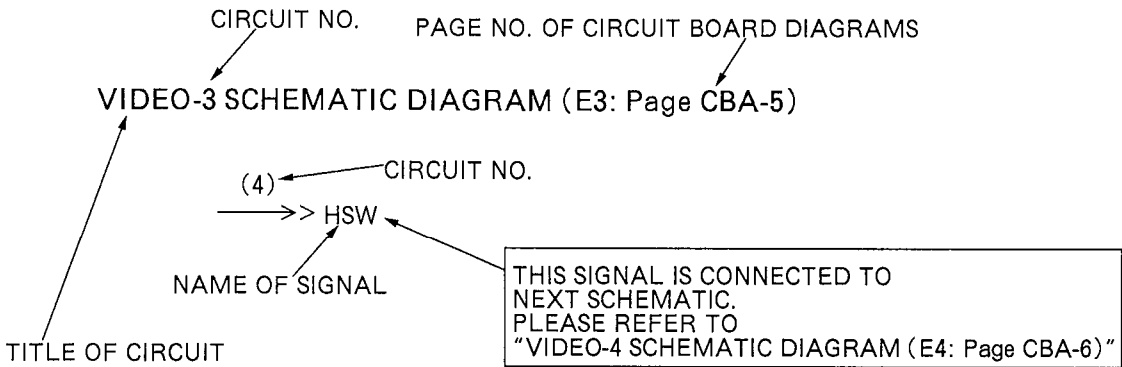
3

SCHEMATIC DIAGRAMS

(EX1)



(EX2)



\* mark  $\Rightarrow$  Parts value, see table in the schematic diagram.

(EX:)

	NTSC	
R2018	10K	10K $\Omega$
R2019	*PAT	No part



# CONTENTS

POWER CONNECT SCHEMATIC DIAGRAM .....	SCM-5
POWER (1) SCHEMATIC DIAGRAM .....	SCM-5
POWER (2) SCHEMATIC DIAGRAM .....	SCM-5
SYSTEM CONTROL SCHEMATIC DIAGRAM .....	SCM-6
SUB SYSTEM CONTROL SCHEMATIC DIAGRAM .....	SCM-7
SERVO SUB (2) SCHEMATIC DIAGRAM .....	SCM-7
REEL SERVO SCHEMATIC DIAGRAM.....	SCM-8
CYLINDER SERVO SCHEMATIC DIAGRAM.....	SCM-9
CTL AMP SCHEMATIC DIAGRAM.....	SCM-10
WIDE SCHEMATIC DIAGRAM .....	SCM-11
CAPSTAN SERVO-1 SCHEMATIC DIAGRAM .....	SCM-12
CAPSTAN SERVO-2 SCHEMATIC DIAGRAM .....	SCM-13
MOTOR DRIVE-1 SCHEMATIC DIAGRAM .....	SCM-14
MOTOR DRIVE-2 SCHEMATIC DIAGRAM .....	SCM-15
SUB POWER SCHEMATIC DIAGRAM .....	SCM-16
VIDEO C-1 SCHEMATIC DIAGRAM .....	SCM-17
VIDEO C-2 SCHEMATIC DIAGRAM .....	SCM-18
VIDEO C-3 SCHEMATIC DIAGRAM .....	SCM-19
VIDEO C-4 SCHEMATIC DIAGRAM .....	SCM-20
VIDEO C COMPARISON CHART .....	SCM-20
VIDEO DIGITAL-1 SCHEMATIC DIAGRAM .....	SCM-21
VIDEO DIGITAL-2 SCHEMATIC DIAGRAM .....	SCM-22
VIDEO DIGITAL-3 SCHEMATIC DIAGRAM .....	SCM-23
VIDEO DIGITAL-4 SCHEMATIC DIAGRAM .....	SCM-24
VIDEO DIGITAL-5 SCHEMATIC DIAGRAM .....	SCM-25
VIDEO DIGITAL-6 SCHEMATIC DIAGRAM .....	SCM-26
VIDEO DIGITAL-7 SCHEMATIC DIAGRAM .....	SCM-27
VIDEO DIGITAL-9 SCHEMATIC DIAGRAM .....	SCM-28
VIDEO DIGITAL-8 SCHEMATIC DIAGRAM .....	SCM-29
VIDEO DIGITAL COMPARISON CHART .....	SCM-30
VIDEO I/O-1 SCHEMATIC DIAGRAM .....	SCM-31
VIDEO I/O-2 SCHEMATIC DIAGRAM .....	SCM-32
VIDEO I/O-3 SCHEMATIC DIAGRAM .....	SCM-33
VIDEO I/O-4 SCHEMATIC DIAGRAM .....	SCM-34
VIDEO I/O-5 SCHEMATIC DIAGRAM .....	SCM-35
VIDEO I/O COMPARISON CHART .....	SCM-35
VIDEO I/O SUB (1) SCHEMATIC DIAGRAM .....	SCM-36
AUDIO METER SCHEMATIC DIAGRAM.....	SCM-36
AUDIO (1) LINER SCHEMATIC DIAGRAM .....	SCM-37
AUDIO (1) CONTROL SCHEMATIC DIAGRAM .....	SCM-38
AUDIO (1) INPUT SCHEMATIC DIAGRAM .....	SCM-39
AUDIO (2) FM AUDIO SCHEMATIC DIAGRAM .....	SCM-40
AUDIO (2) TC SCHEMATIC DIAGRAM .....	SCM-41
AUDIO (2) PHONE SCHEMATIC DIAGRAM .....	SCM-42
AUDIO (2) FLYING ERASE SCHEMATIC DIAGRAM .....	SCM-43
AUDIO (2) OUT PUT SCHEMATIC DIAGRAM .....	SCM-44
INTERFACE-1 SCHEMATIC DIAGRAM .....	SCM-45
INTERFACE-2 SCHEMATIC DIAGRAM .....	SCM-46
INTERFACE-3 SCHEMATIC DIAGRAM .....	SCM-47
INTERFACE-4 SCHEMATIC DIAGRAM .....	SCM-48
INTERFACE-5 SCHEMATIC DIAGRAM .....	SCM-49
FRONT LED SCHEMATIC DIAGRAM .....	SCM-49
FRONT-1 SCHEMATIC DIAGRAM .....	SCM-50
FRONT-2 SCHEMATIC DIAGRAM .....	SCM-51
FRONT-3 SCHEMATIC DIAGRAM .....	SCM-52
FRONT COMPARISON CHART.....	SCM-53
FRONT JACK SCHEMATIC DIAGRAM .....	SCM-53
MIC JACK SCHEMATIC DIAGRAM .....	SCM-54
KEYBOARD SCHEMATIC DIAGRAM .....	SCM-55



Y MEMORY-1 SCHEMATIC DIAGRAM .....	SCM-56
Y MEMORY-2 SCHEMATIC DIAGRAM .....	SCM-57
SYNC SEP & AFC SCHEMATIC DIAGRAM .....	SCM-58
CLAMP & AMP SCHEMATIC DIAGRAM .....	SCM-59
D.M.S. SCHEMATIC DIAGRAM .....	SCM-60
C MEMORY SCHEMATIC DIAGRAM .....	SCM-61
TBC & D.M.S. G.A. BLOCK SCHEMATIC DIAGRAM .....	SCM-62
TBC (1) SCHEMATIC DIAGRAM .....	SCM-63
TBC (1) COMPARISON CHART .....	SCM-63
TBC SUB SCHEMATIC DIAGRAM .....	SCM-64
SYNC GEN-1 SCHEMATIC DIAGRAM .....	SCM-65
SYNC GEN-2 SCHEMATIC DIAGRAM .....	SCM-66
SYNC GEN-3 SCHEMATIC DIAGRAM .....	SCM-67
ENCODER SCHEMATIC DIAGRAM .....	SCM-68
TBC (2) CONNECTION SCHEMATIC DIAGRAM .....	SCM-69
TBC (2) COMPARISON CHART .....	SCM-69
TIME CODE-1 SCHEMATIC DIAGRAM .....	SCM-70
TIME CODE-2 SCHEMATIC DIAGRAM .....	SCM-71
TIME CODE COMPARISON CHART .....	SCM-71
REAR AMP VIDEO SCHEMATIC DIAGRAM .....	SCM-72
REAR AMP AUDIO OUT SCHEMATIC DIAGRAM .....	SCM-73
REAR AMP AUDIO IN SCHEMATIC DIAGRAM .....	SCM-74
REAR AMP COMPARISON CHART .....	SCM-74
9PIN CONNECT SCHEMATIC DIAGRAM .....	SCM-74
REAR JACK SCHEMATIC DIAGRAM .....	SCM-75
XLR M & XLR F SCHEMATIC DIAGRAM .....	SCM-76
HEAD AMP SCHEMATIC DIAGRAM .....	SCM-77
REEL DRIVE SCHEMATIC DIAGRAM .....	SCM-78
MOTHER SCHEMATIC DIAGRAM .....	SCM-79
INTERCONNECTION SCHEMATIC DIAGRAM .....	SCM-80



## IMPORTANT SAFETY NOTICE

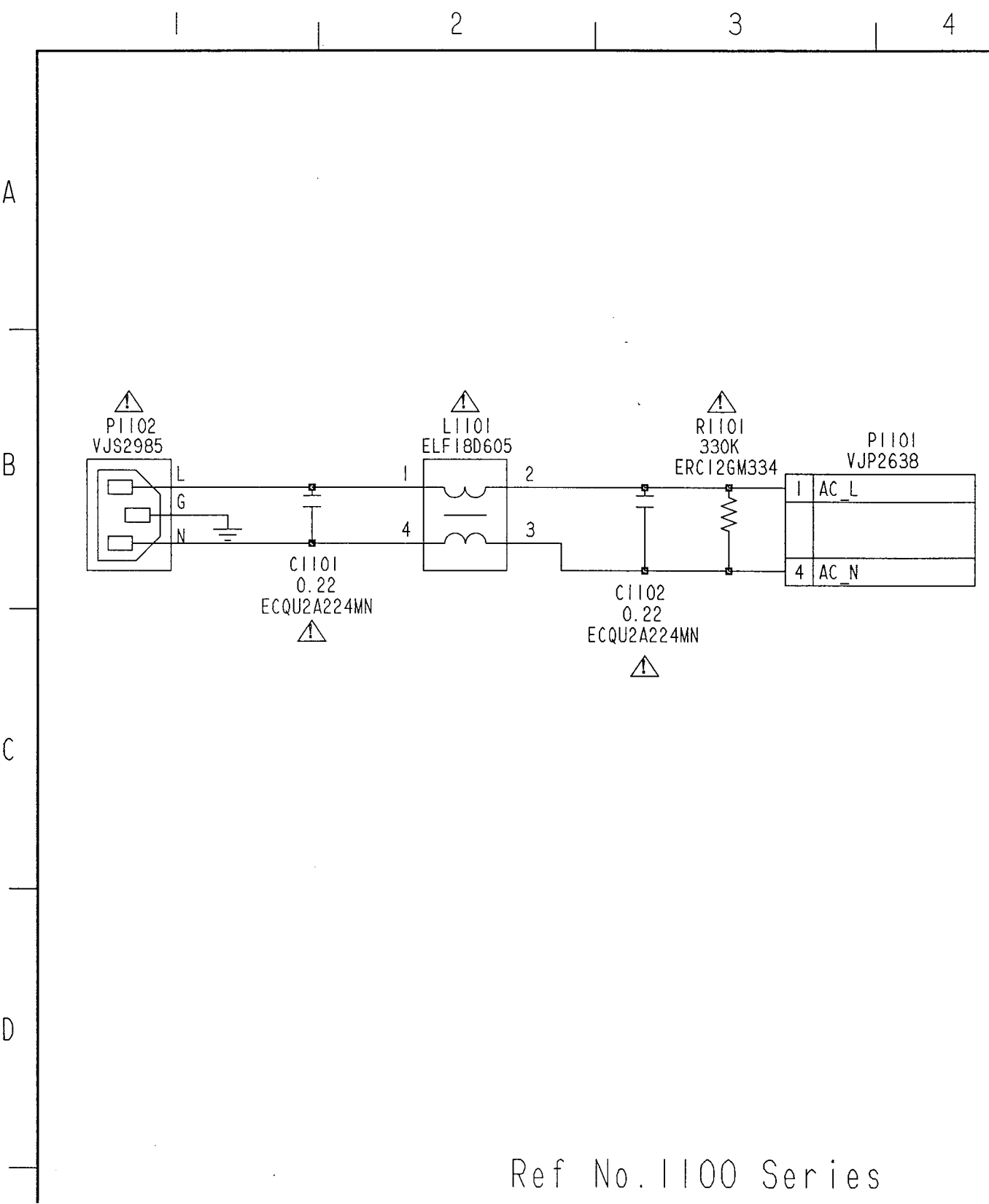
COMPONENTS IDENTIFIED WITH THE MARK  $\triangle$  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.  
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

## NOTE

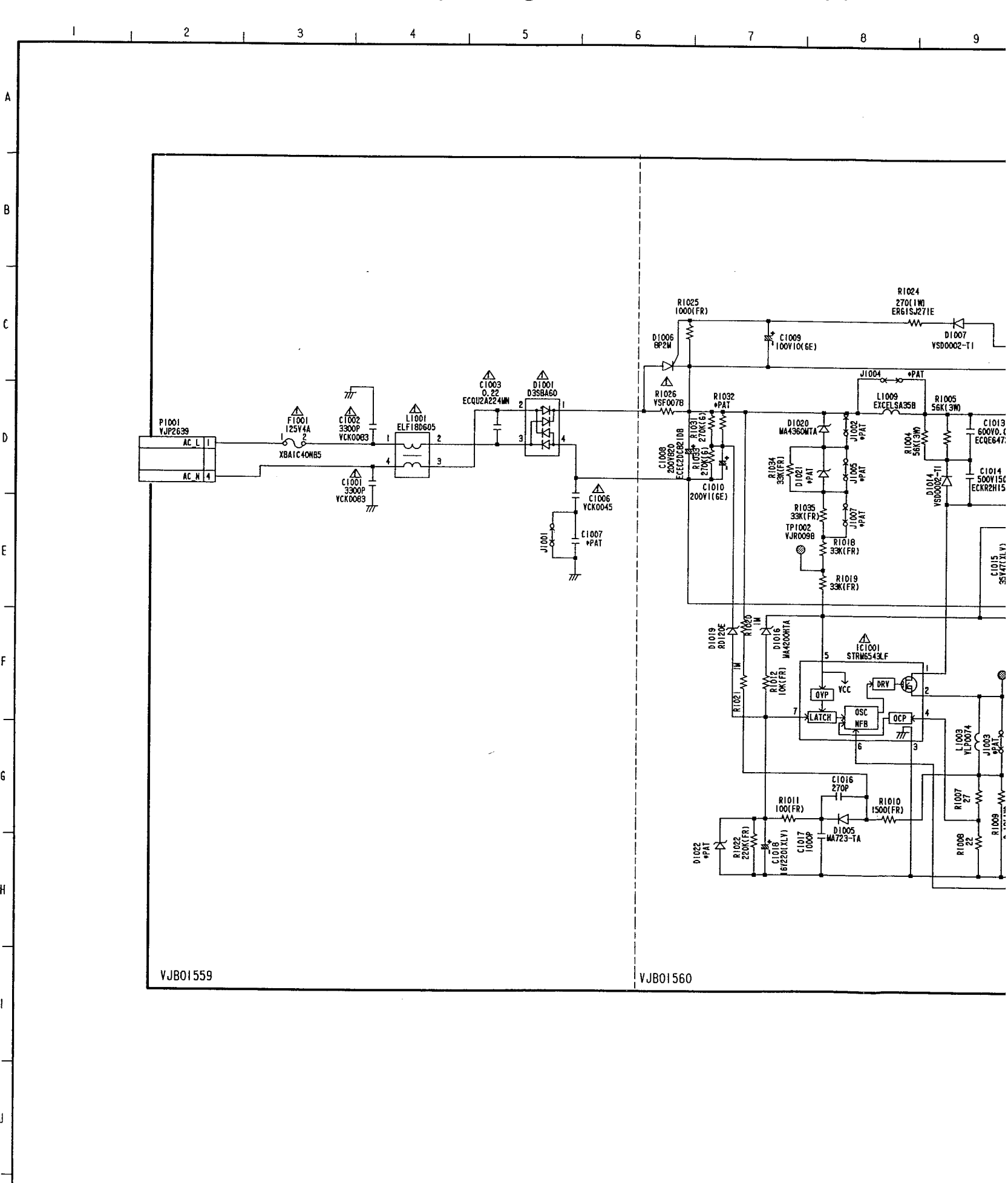
DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



POWER CONNECT SCHEMATIC DIAGRAM (E32)



POWER (1) SCHEMATIC DIAGRAM (E1: Page CBA-3) AND POWER (2) SCHEMATIC



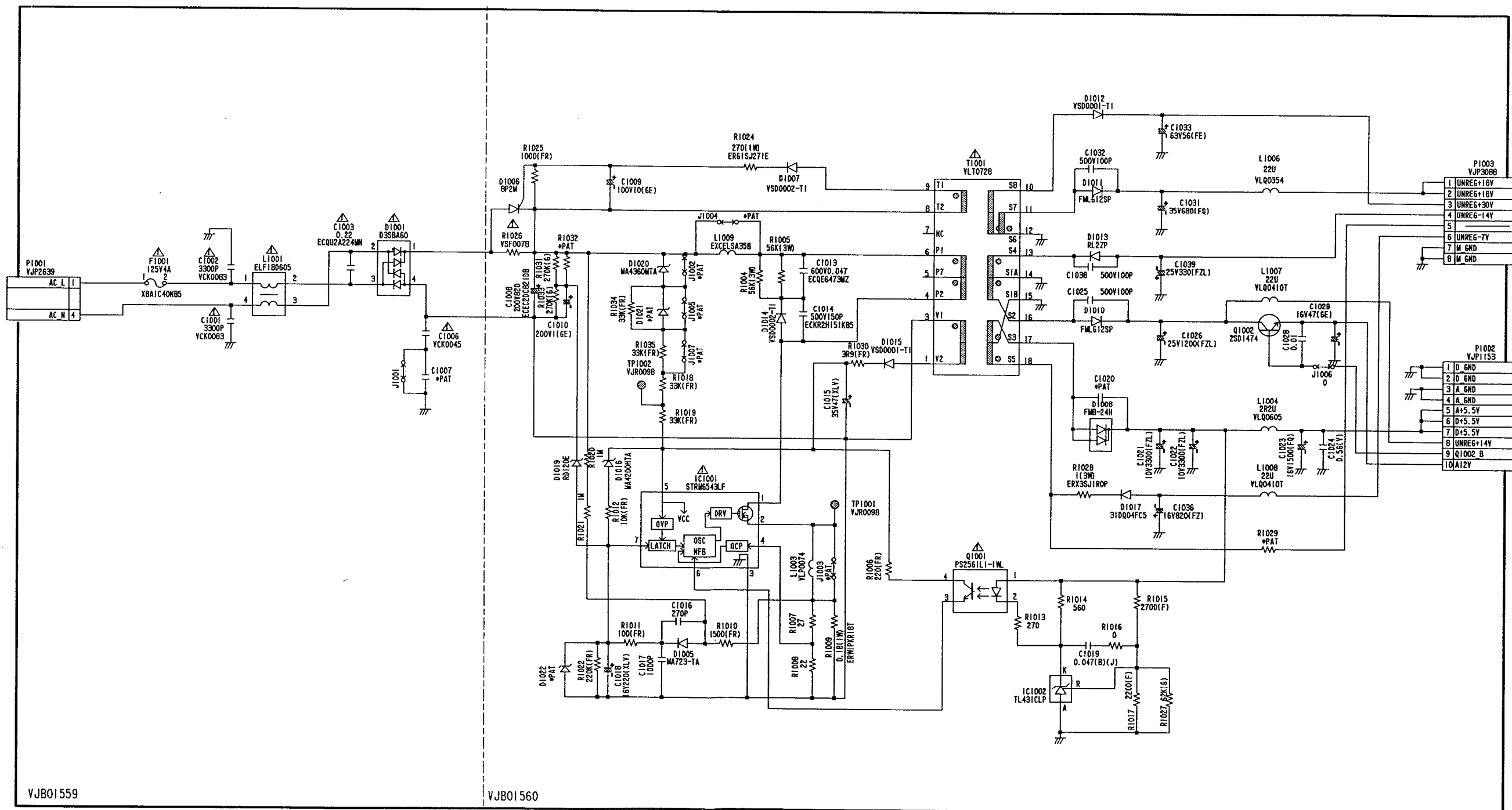


# POWER (1) SCHEMATIC DIAGRAM (E1: Page CBA-3) AND POWER (2) SCHEMATIC DIAGRAM (E2: Page CBA-3)

P1101  
VJP2638

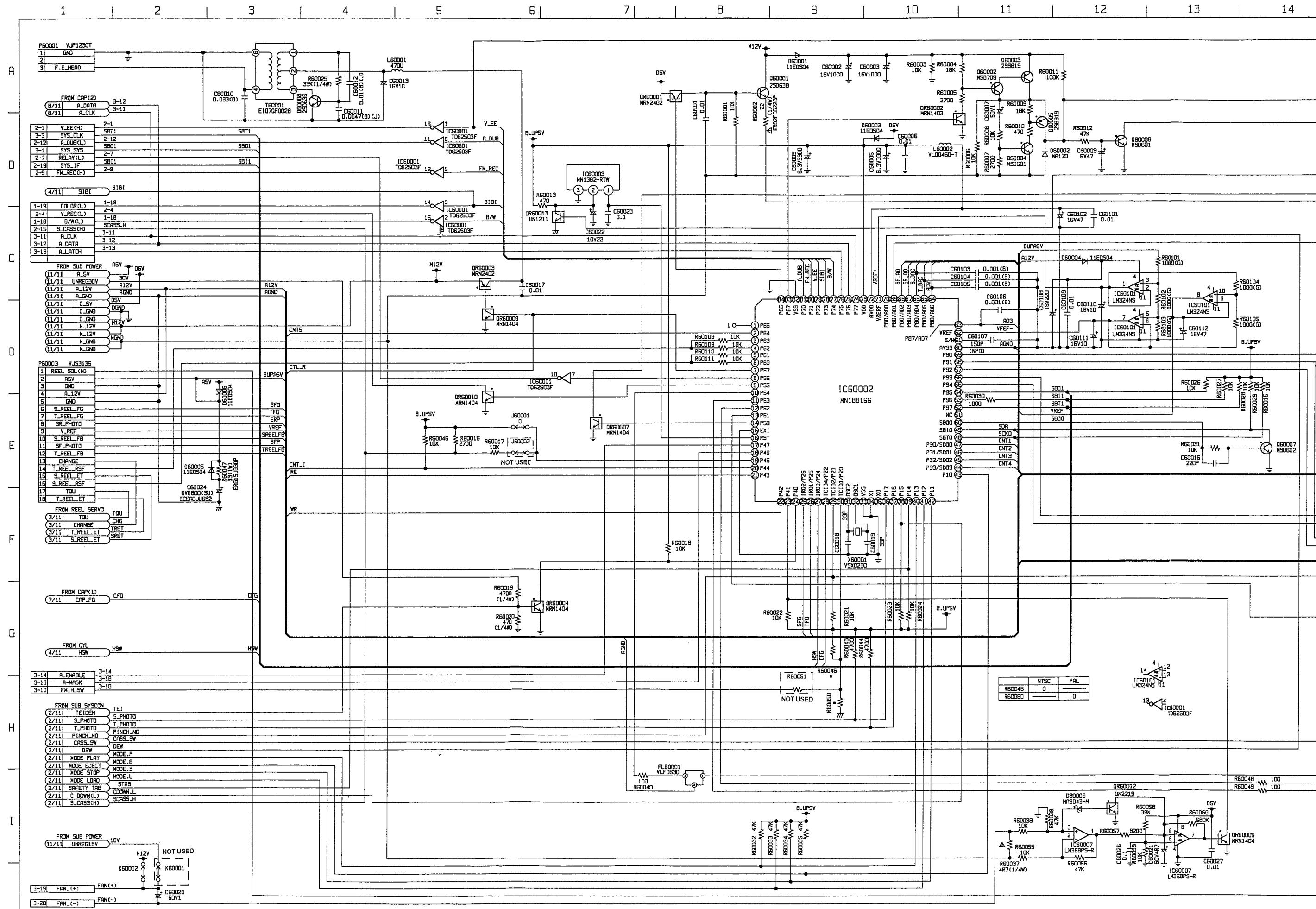
L	1
N	4

es

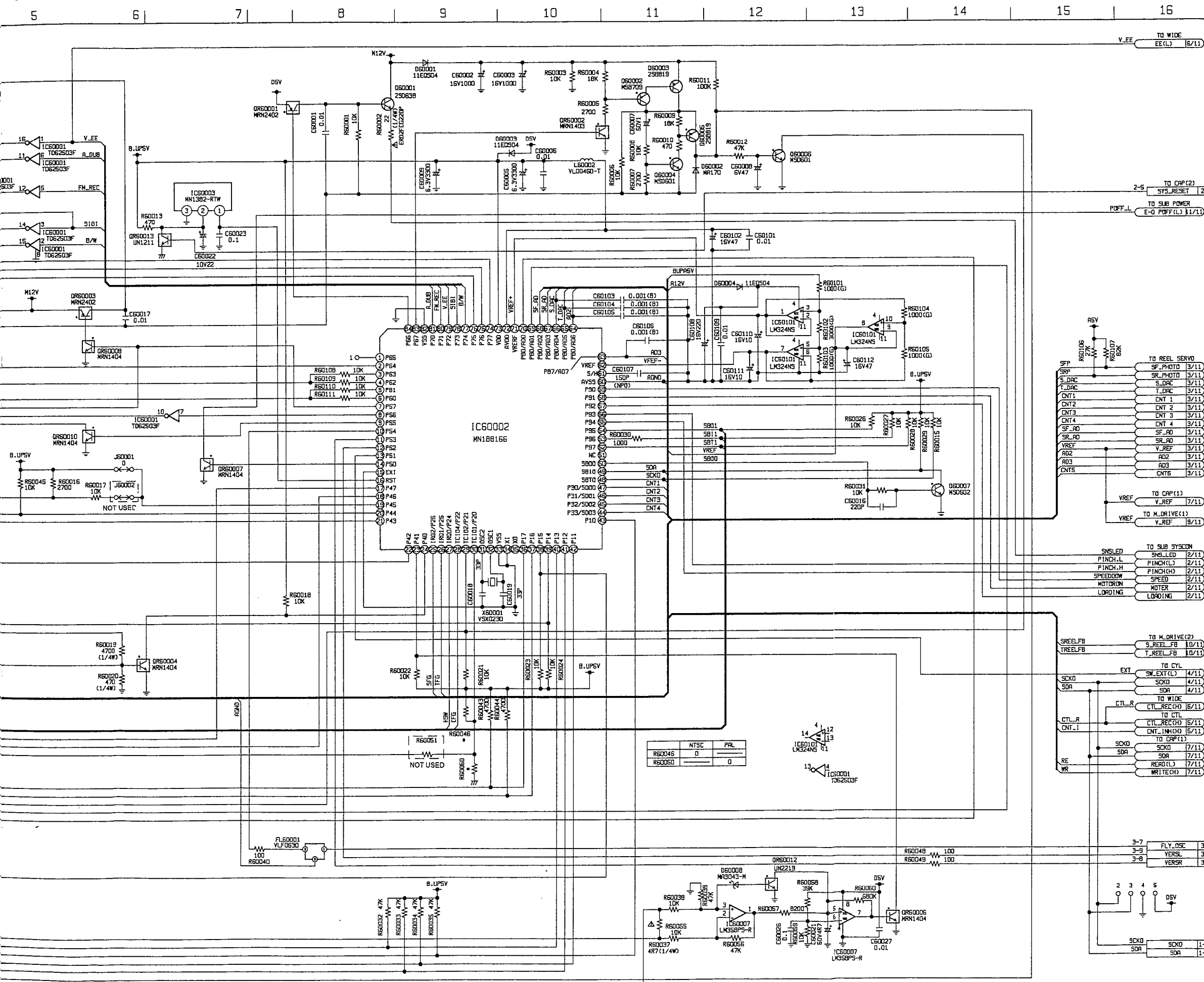




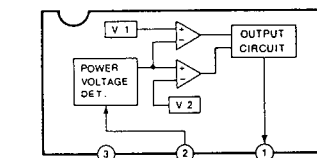
**SYSTEM CONTROL SCHEMATIC DIAGRAM (E3: Page CBA-5) 1/11**







IC60003  
MN1382-RTW



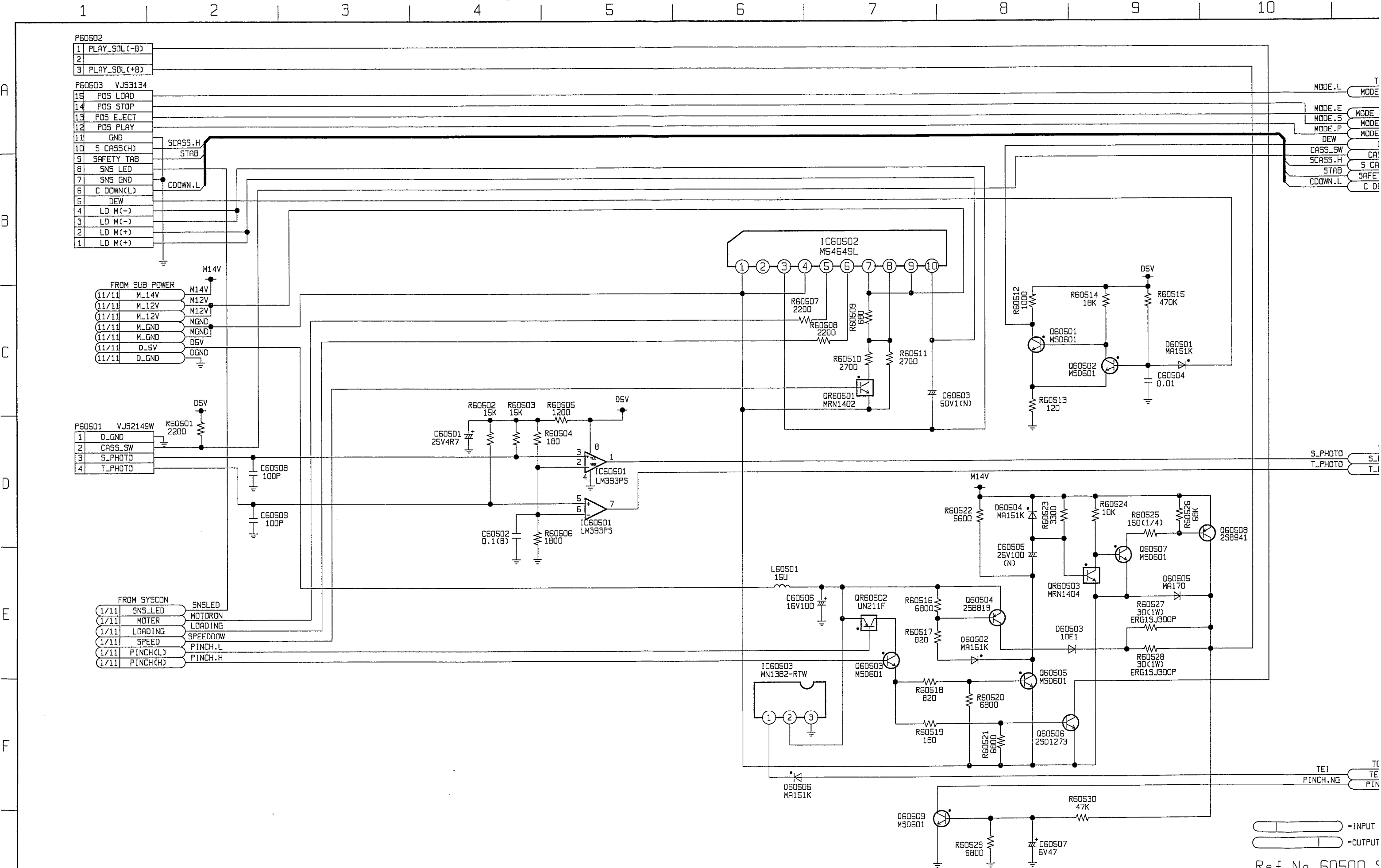
- TO CAP(2)
- TO SUB POWER
- TO REEL SERVO
- SF\_PHOTO 3/11
- SR\_PHOTO 3/11
- S\_DAC 3/11
- T\_DAC 3/11
- CNT1 3/11
- CNT2 3/11
- CNT3 3/11
- CNT4 3/11
- SF\_AD 3/11
- SR\_AD 3/11
- V\_REF 3/11
- AD2 3/11
- AD3 3/11
- CNT5 3/11
- TO CAP(1)
- V\_REF 7/11
- TO M\_DRIVE(1)
- V\_REF 9/11
- TO SUB SYSTEM
- SNS\_LED 2/11
- PINCH.L 2/11
- PINCH.H 2/11
- SPEEDDOWN 2/11
- MOTORON 2/11
- LOADING 2/11
- TO M\_DRIVE(2)
- S\_REEL\_FB 10/11
- T\_REEL\_FB 10/11
- TO CYL
- SW\_EXT(L) 4/11
- SDA 4/11
- TO WIDE
- CTL\_RECCH 6/11
- TO CTL
- CTL\_RECCH 6/11
- CNT\_INHCH 6/11
- TO CAP(1)
- SDA 7/11
- SDA 7/11
- READ(L) 7/11
- WRITECH 7/11
- FLY\_OSC 3-7
- VERSL 3-8
- VERSR 3-8
- SDA 1-14
- SDA 1-15

	NTSC	PAL
R60045	0	0
R60050	0	0

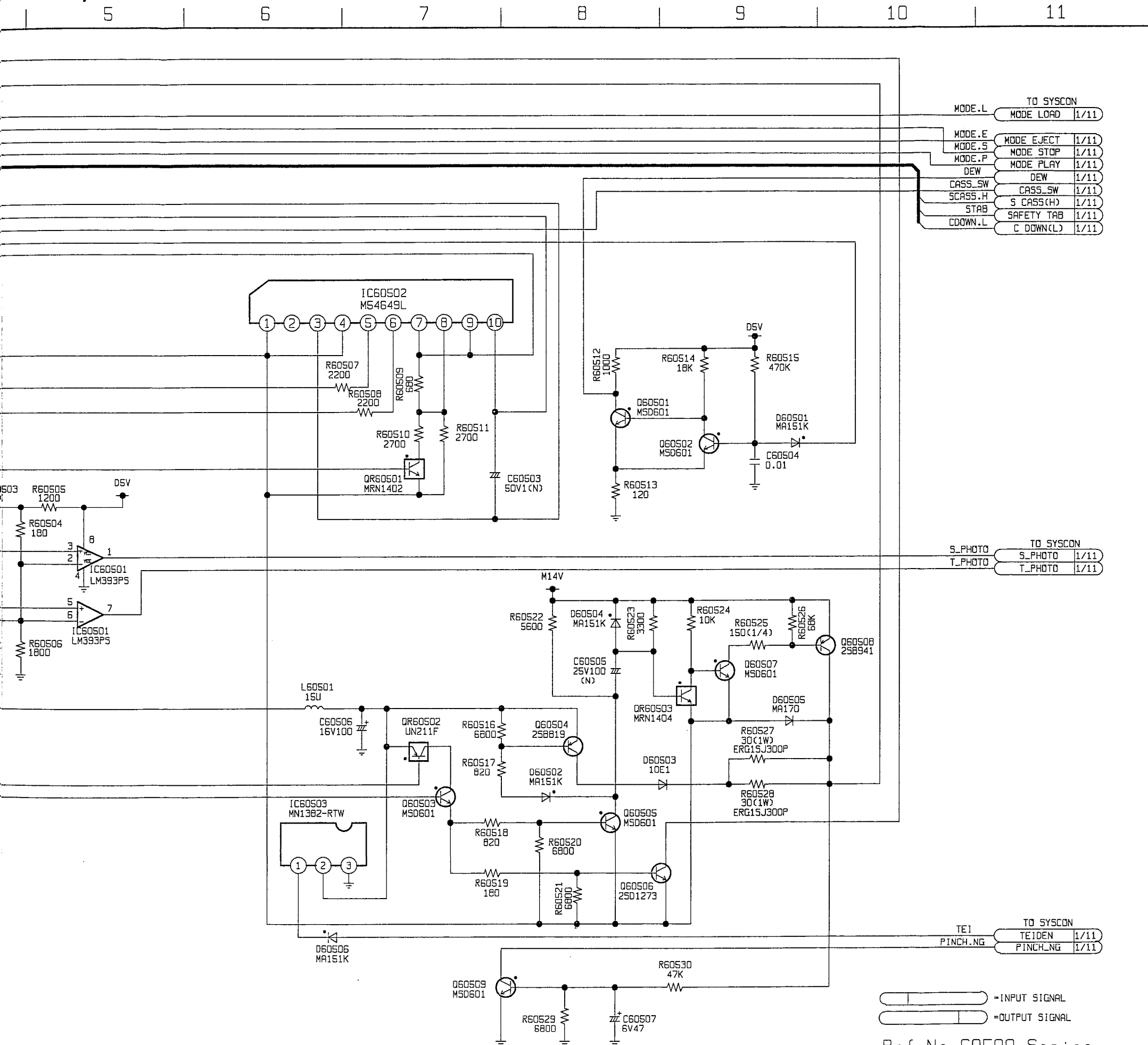
= INPUT SIGNAL  
 = OUTPUT SIGNAL  
 ■-REFER TO THE COMPARISON CHART  
 Ref No.60000 Series.



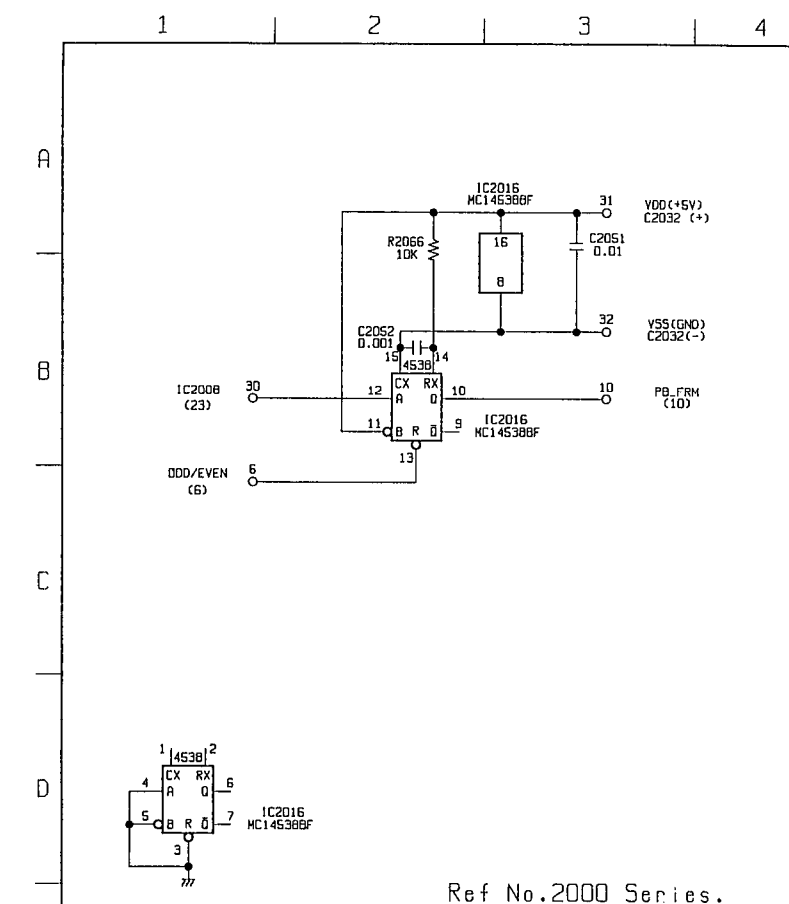
SUB SYSTEM CONTROL SCHEMATIC DIAGRAM (E3: Page CBA-5) 2/11



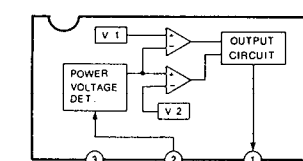




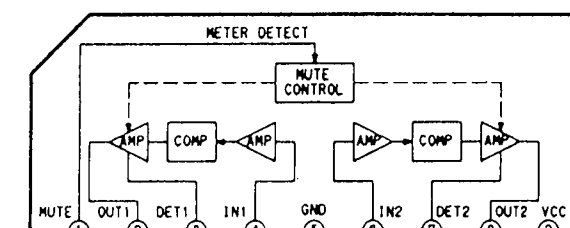
## SERVO SUB (2) SCHEMATIC DIAGRAM (E103)



### IC60503 MN1382-RTW

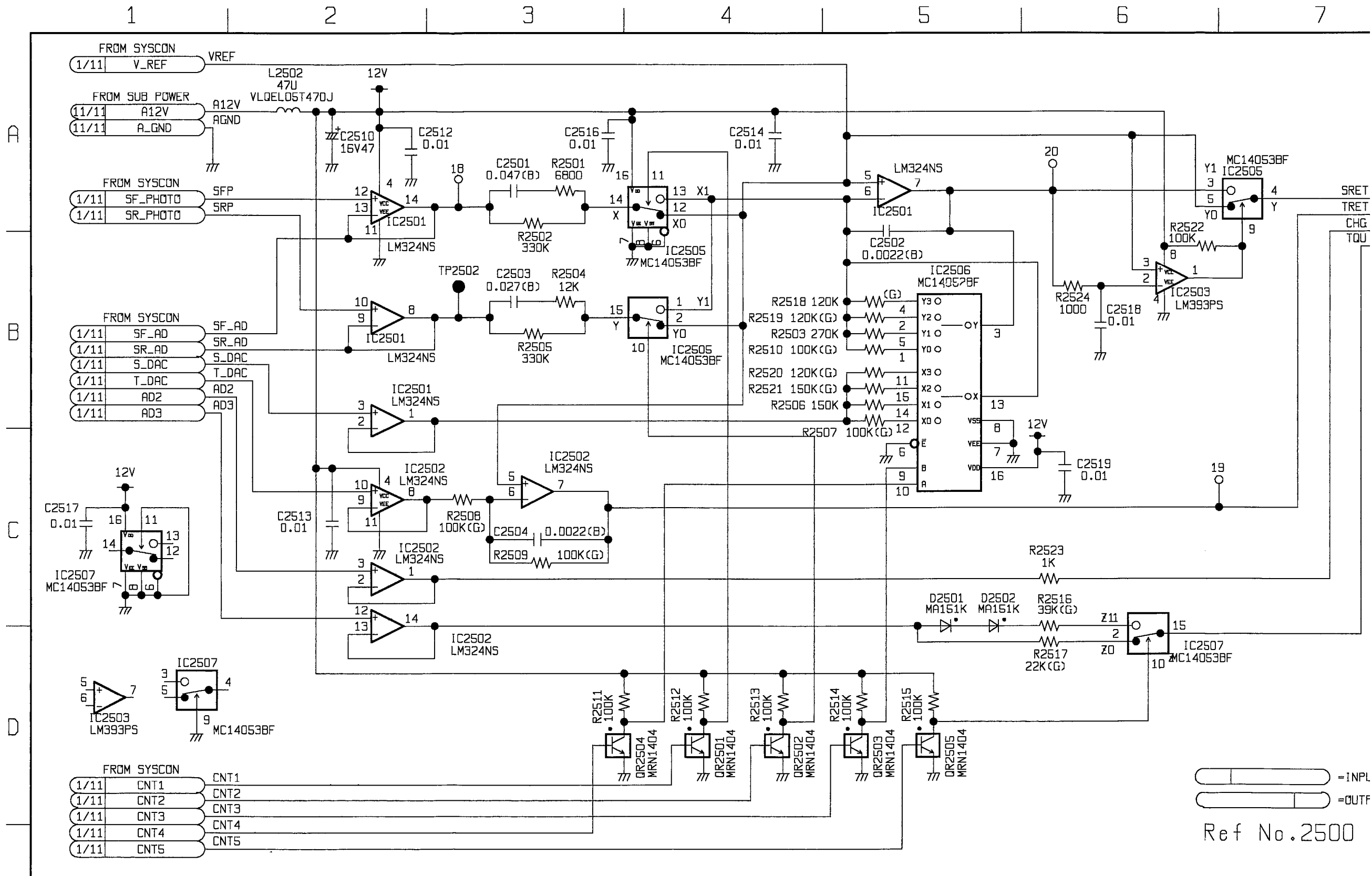


### IC60502 M54649L

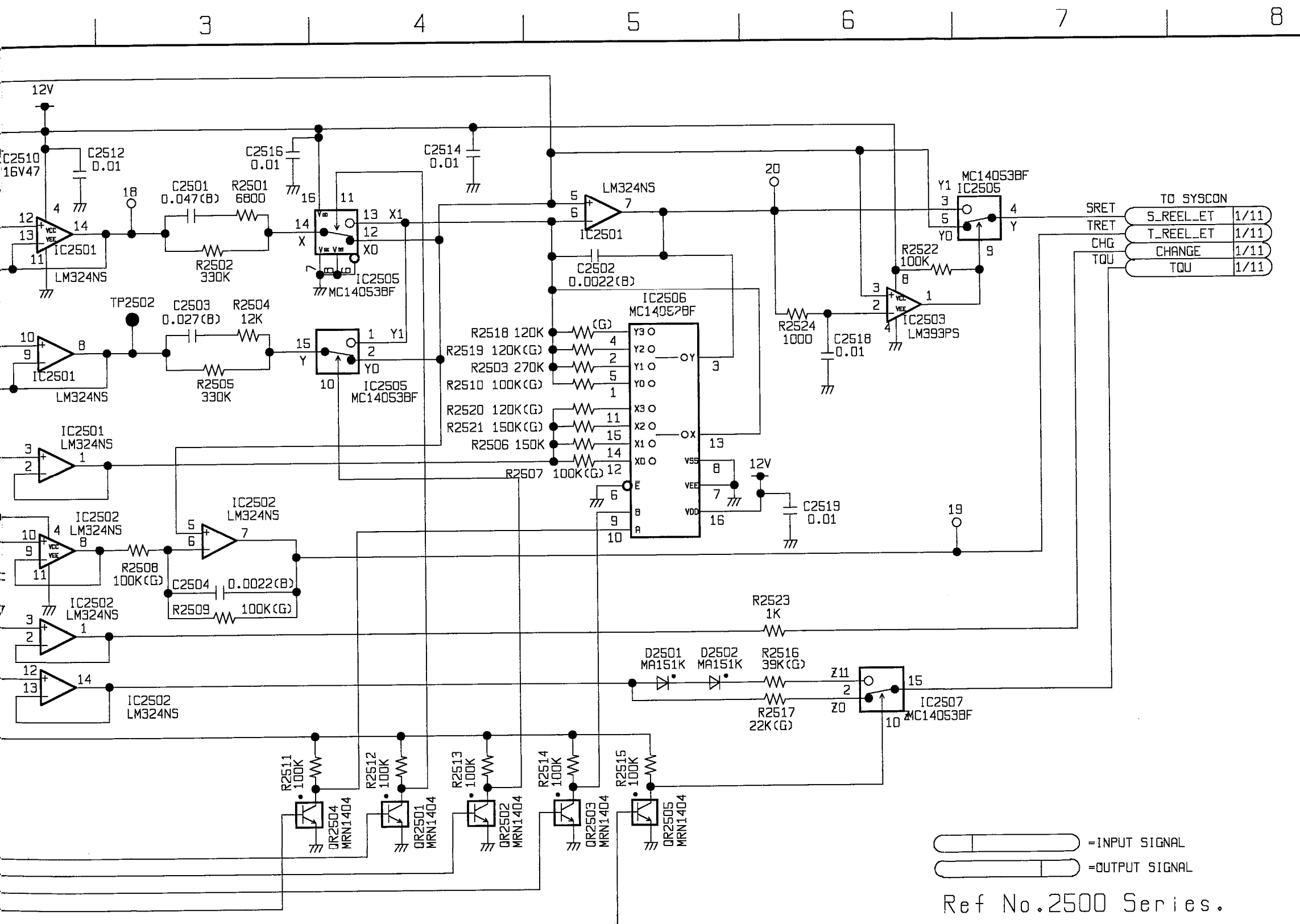




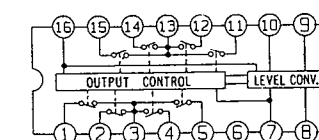
## REEL SERVO SCHEMATIC DIAGRAM (E3: Page CBA-5) 3/11





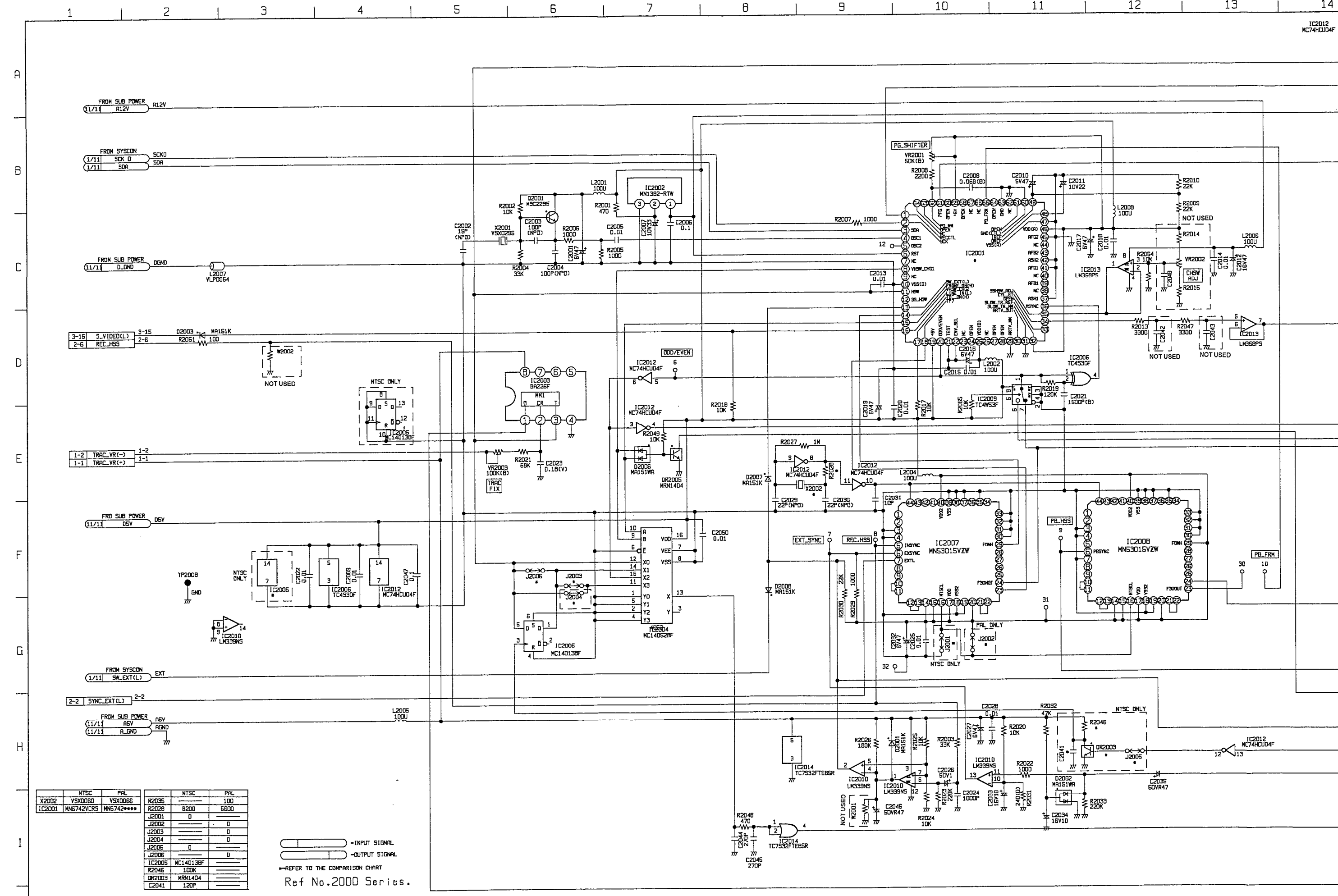


IC2506  
MC14052BF





**CYL SERVO SCHEMATIC DIAGRAM (E3: Page CBA-5) 4/11**

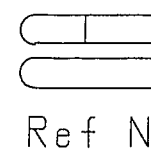




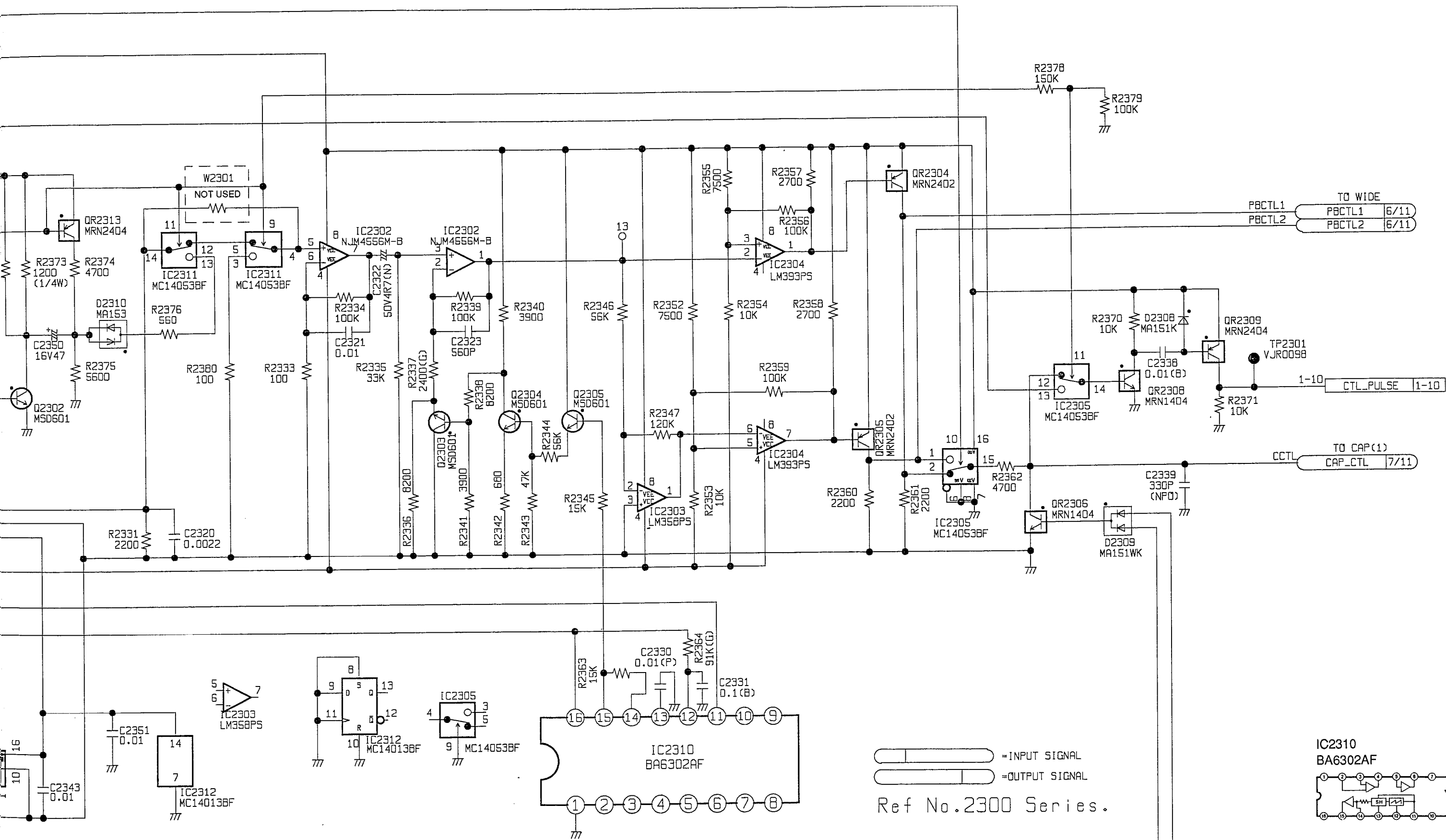




1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---







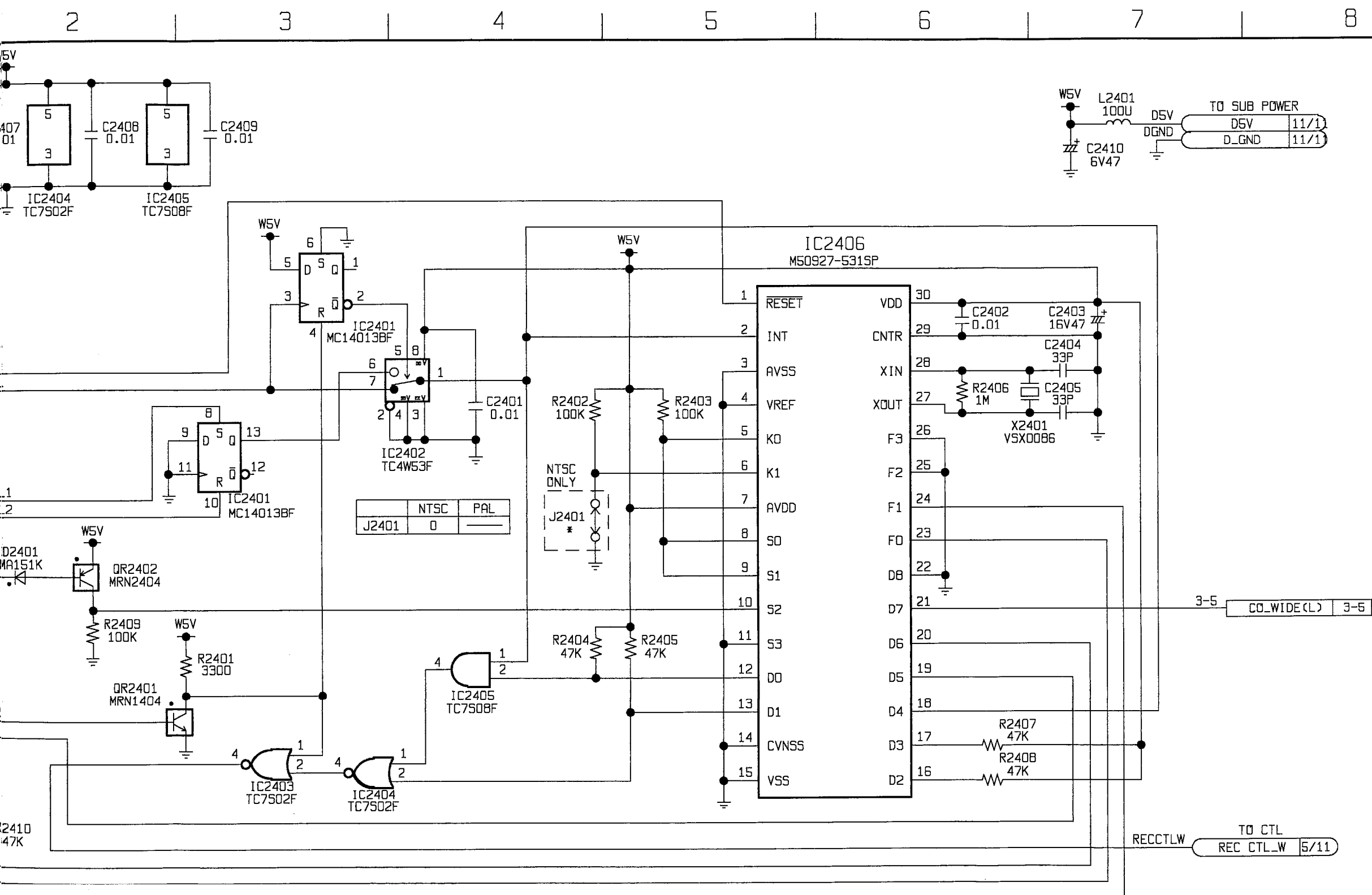


The schematic diagram illustrates the internal circuitry of the Ref No. 2400 Series. It features several integrated circuits (ICs) including MC14013BF, TC7S02F, TC7S08F, TC4W53F, and M50927-531SP. The circuit is powered by a W5V supply and includes various passive components like resistors (R2401-R2409) and capacitors (C2401-C2409). Signal inputs and outputs are labeled, such as S\_VIDE0(L), CI\_WIDE(L), M\_WIDE(H), M\_NORMAL(H), and various control signals like RESET, REC\_CTL, PBCTL1, PBCTL2, CTL\_REC(H), and EE(L). A table for J2401 is provided, showing settings for NTSC and PAL. The diagram also includes a legend for input and output signals and a reference to a comparison chart.

	NTSC	PAL
J2401	0	

Legend:  
 [Symbol] = INPUT SIGNAL  
 [Symbol] = OUTPUT SIGNAL  
 \* = REFER TO THE COMPARISON CHART  
 Ref No. 2400 Series.





=INPUT SIGNAL

=OUTPUT SIGNAL

RISEON CHART

0 Series.







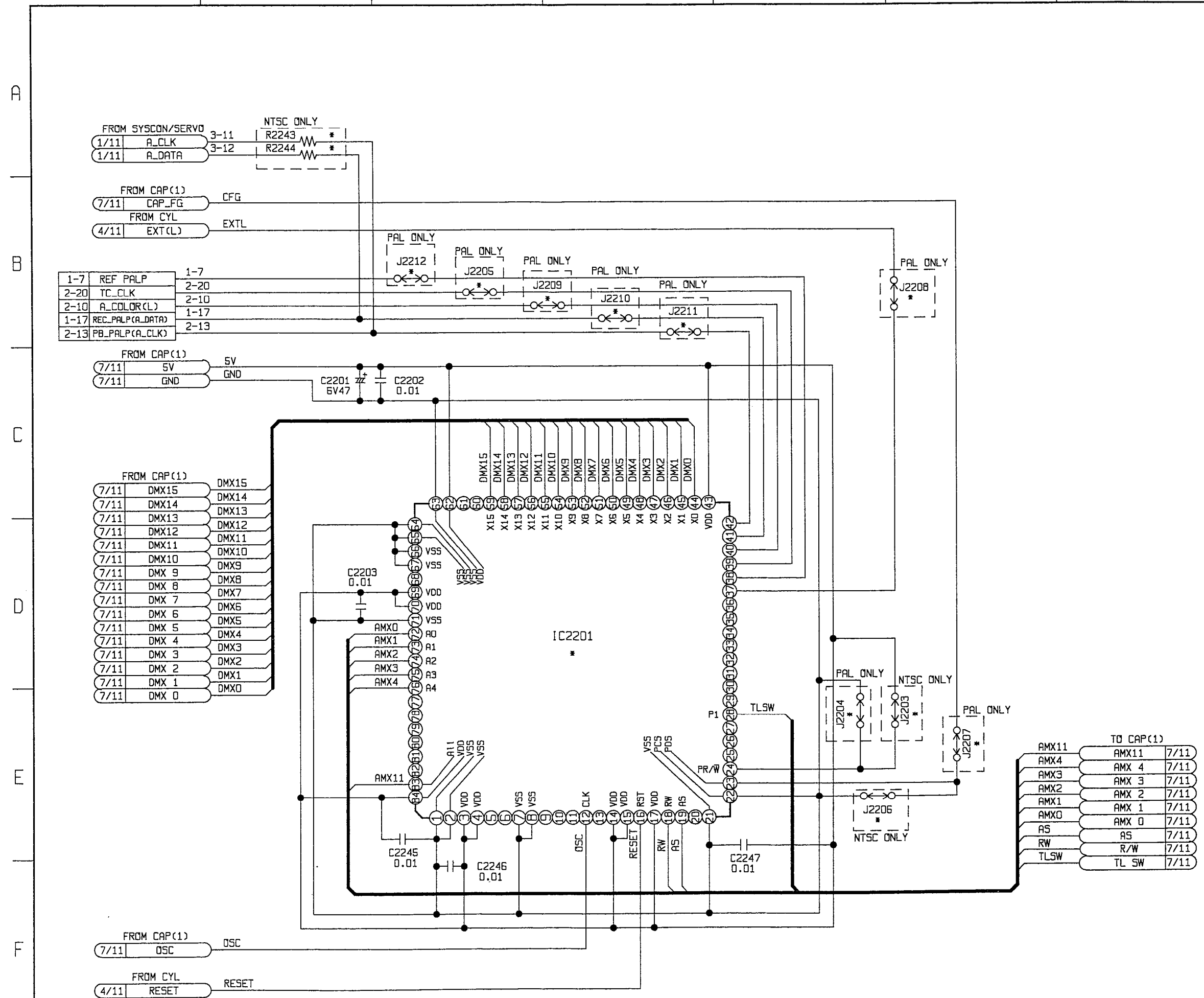
**DIAGRAM (E3: Page CBA-5) 7/11**



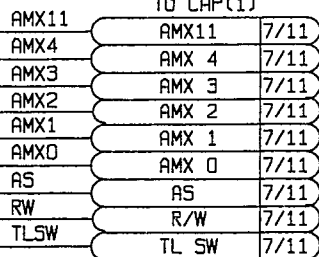
Ref No. 2200 Serise.



# CAPSTAN SERVO-2 SCHEMATIC DIAGRAM (E3: Page CBA-5) 8/11





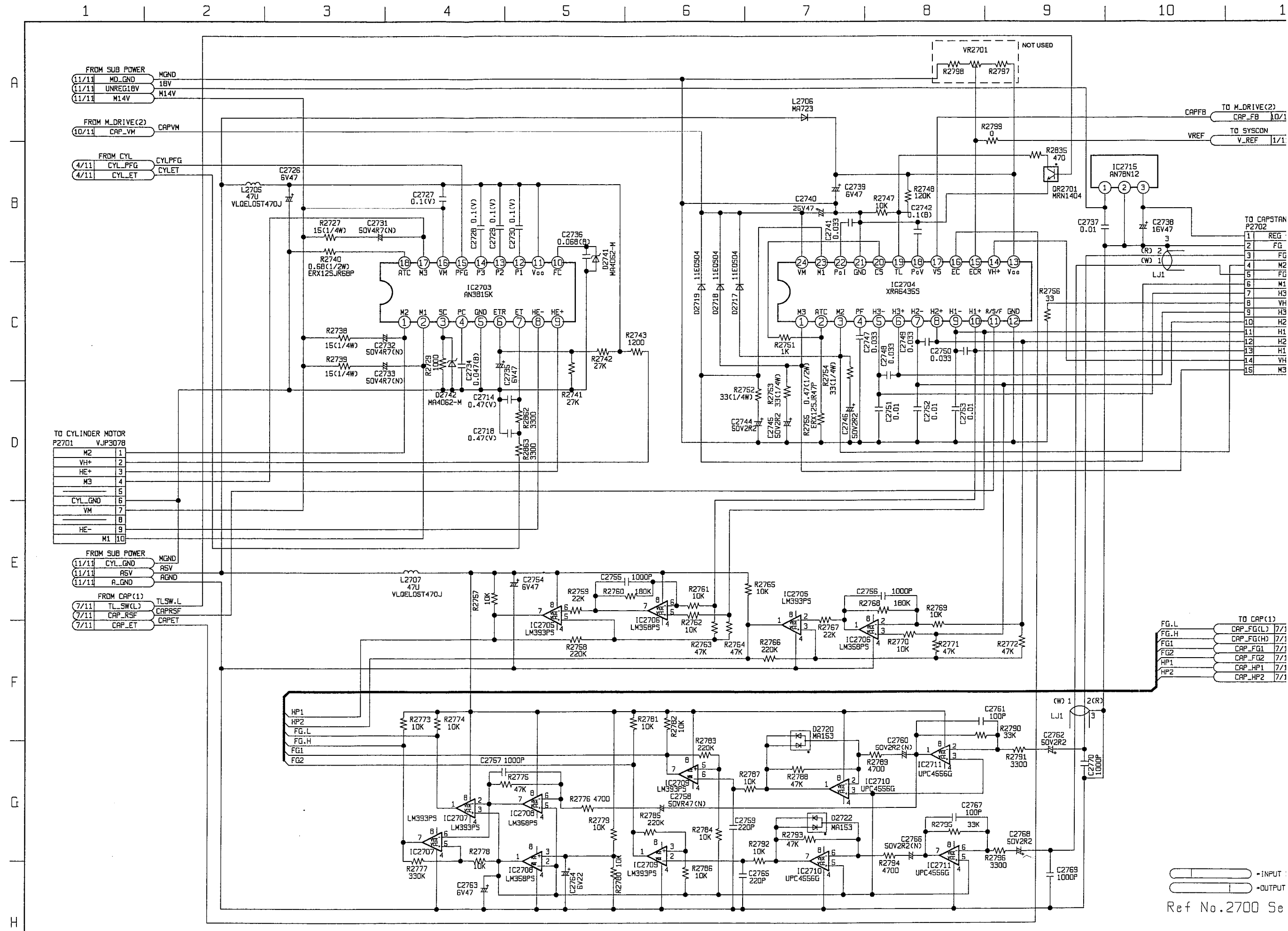


	NTSC	PAL
IC2201	MN19041 VSWA	MN19041 ****
J2203	0	—
J2204	—	0
J2205	—	0
J2206	0	—
J2207	—	0
J2208	—	0
J2209	—	0
J2210	—	0
J2211	—	0
J2212	—	0
R2243	0	—
R2244	0	—

Ref No. 2200 Series.

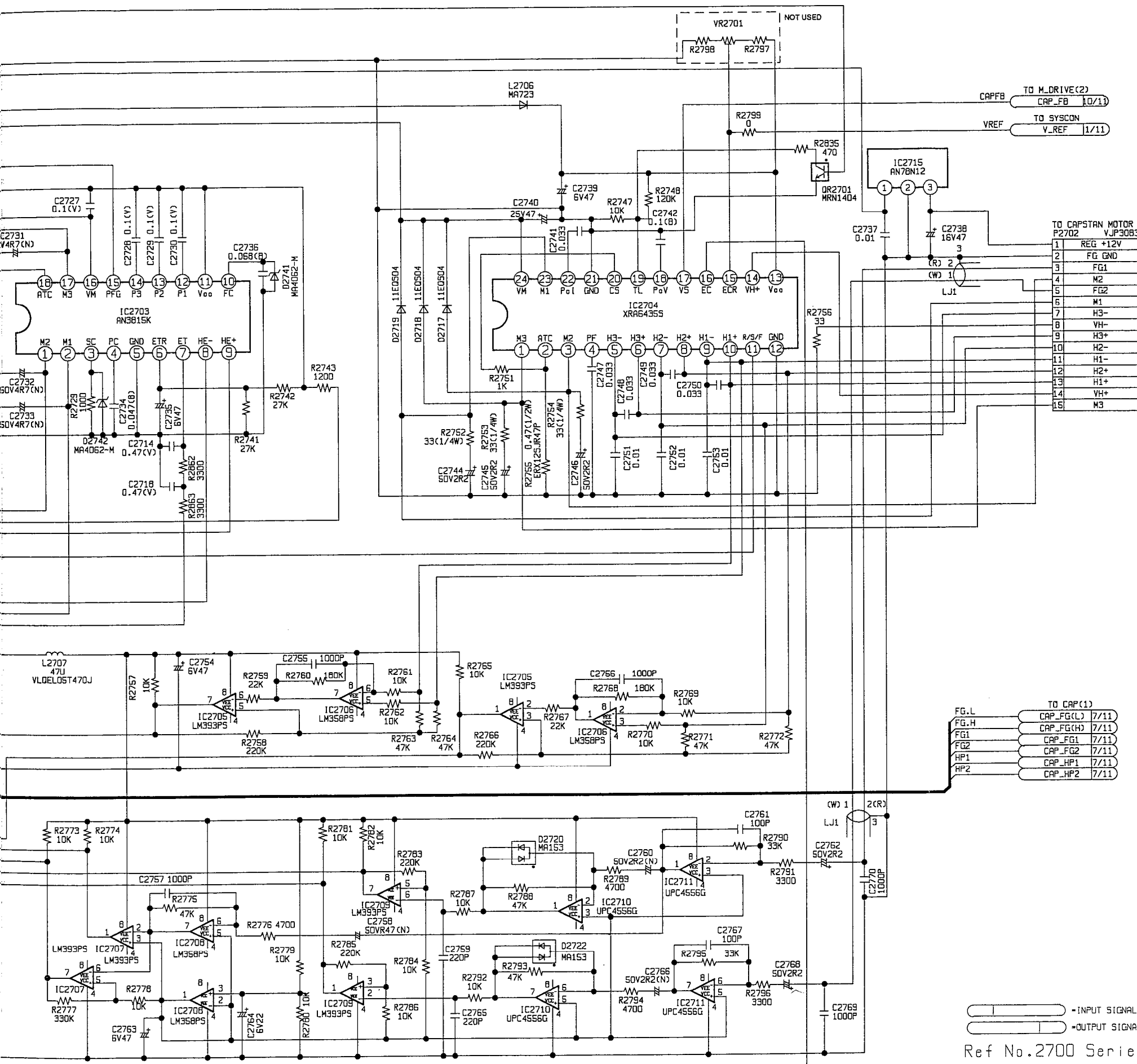


# MOTER DRIVE-1 SCHEMATIC DIAGRAM (E3: Page CBA-5) 9/11

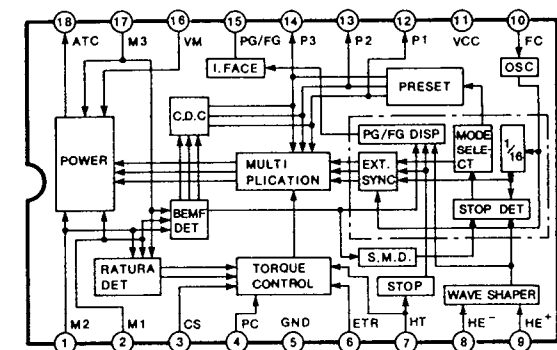


= INPUT  
 = OUTPUT  
 Ref No.2700 Se

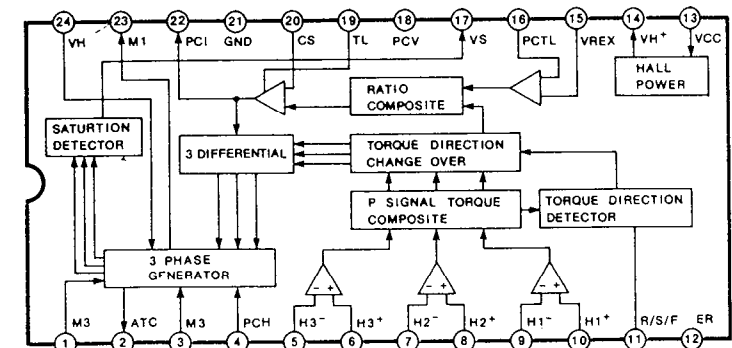




IC2703  
AN3815K



IC2704  
XRA6435S

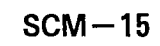




The schematic diagram illustrates the internal circuitry of the Servo Motor Driver PCB (Rev. 1.0). The circuit is organized into sections A through G and 1 through 10. Key components and connections include:

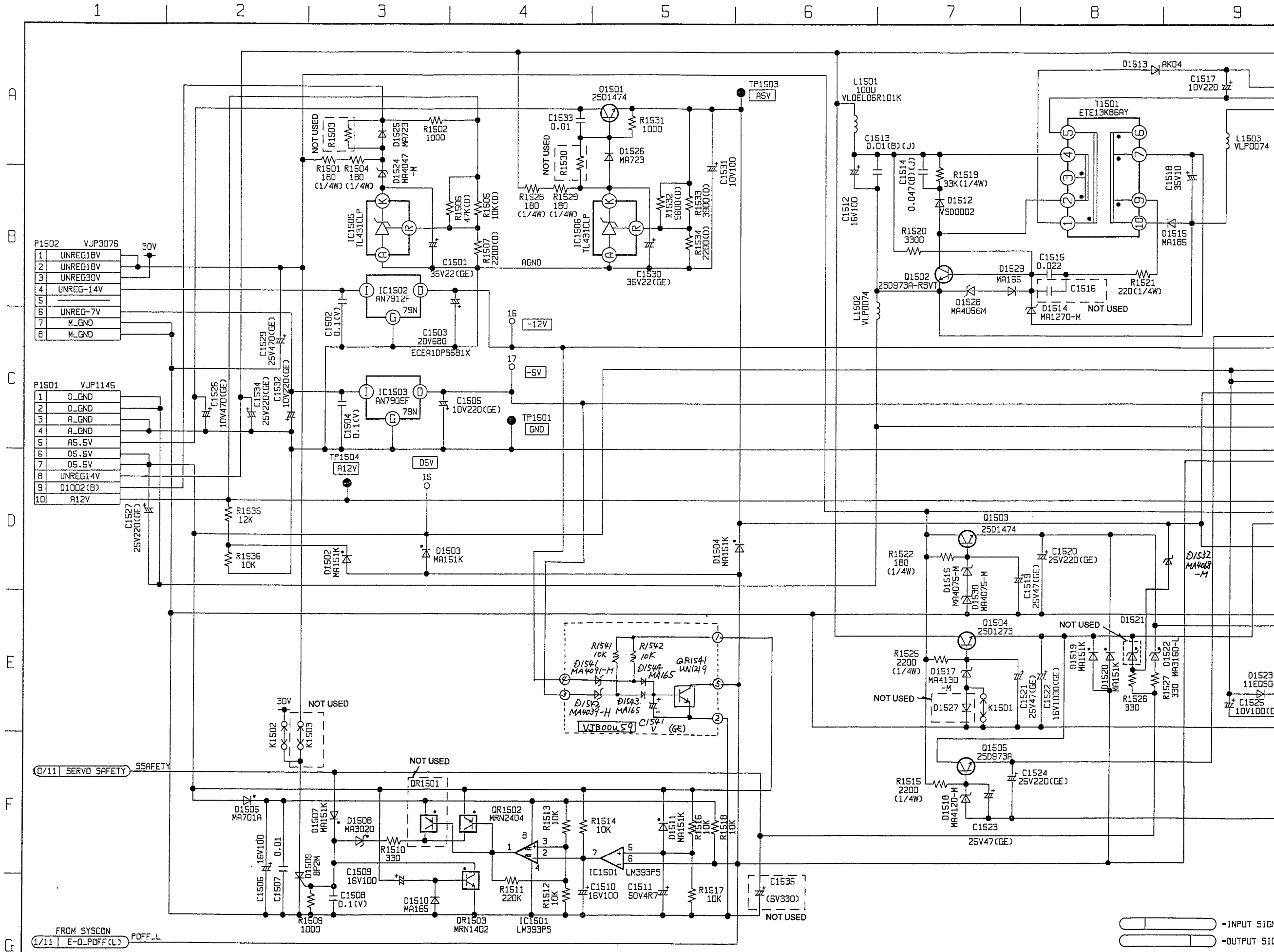
- Input Signals:**
  - FROM SUB POWER: ASV (11/11), CAP\_FB (9/11), M14V (11/11), SW\_GND (11/11), SSAFETY (11/11), UNREG30V (11/11), UNREG18V (11/11), S\_REEL\_FB (1/11), T\_REEL\_FB (1/11).
- IC2701 (BA6149LS):** A central integrated circuit with pins 1 through 24. It is connected to various resistors (R2701, R2702, R2703, R2704, R2705, R2706, R2707, R2708, R2709, R2710, R2711, R2712, R2713, R2714, R2715, R2716, R2717, R2718, R2719, R2720, R2721, R2722, R2723, R2724, R2725, R2726, R2727, R2728, R2729, R2730, R2731, R2732, R2733, R2734, R2735, R2736, R2737, R2738, R2739, R2740, R2741, R2742, R2743, R2744, R2745, R2746, R2747, R2748, R2749, R2750, R2751, R2752, R2753, R2754, R2755, R2756, R2757, R2758, R2759, R2760, R2761, R2762, R2763, R2764, R2765, R2766, R2767, R2768, R2769, R2770, R2771, R2772, R2773, R2774, R2775, R2776, R2777, R2778, R2779, R2780, R2781, R2782, R2783, R2784, R2785, R2786, R2787, R2788, R2789, R2790, R2791, R2792, R2793, R2794, R2795, R2796, R2797, R2798, R2799, R2800, R2801, R2802, R2803, R2804, R2805, R2806, R2807, R2808, R2809, R2810, R2811, R2812, R2813, R2814, R2815, R2816, R2817, R2818, R2819, R2820, R2821, R2822, R2823, R2824, R2825, R2826, R2827, R2828, R2829, R2830, R2831, R2832, R2833, R2834, R2835, R2836, R2837, R2838, R2839, R2840, R2841, R2842, R2843, R2844, R2845, R2846, R2847, R2848, R2849, R2850, R2851, R2852, R2853, R2854, R2855, R2856, R2857, R2858, R2859, R2860, R2861, R2862, R2863, R2864, R2865, R2866, R2867, R2868, R2869, R2870, R2871, R2872, R2873, R2874, R2875, R2876, R2877, R2878, R2879, R2880, R2881, R2882, R2883, R2884, R2885, R2886, R2887, R2888, R2889, R2890, R2891, R2892, R2893, R2894, R2895, R2896, R2897, R2898, R2899, R2900, R2901, R2902, R2903, R2904, R2905, R2906, R2907, R2908, R2909, R2910, R2911, R2912, R2913, R2914, R2915, R2916, R2917, R2918, R2919, R2920, R2921, R2922, R2923, R2924, R2925, R2926, R2927, R2928, R2929, R2930, R2931, R2932, R2933, R2934, R2935, R2936, R2937, R2938, R2939, R2940, R2941, R2942, R2943, R2944, R2945, R2946, R2947, R2948, R2949, R2950, R2951, R2952, R2953, R2954, R2955, R2956, R2957, R2958, R2959, R2960, R2961, R2962, R2963, R2964, R2965, R2966, R2967, R2968, R2969, R2970, R2971, R2972, R2973, R2974, R2975, R2976, R2977, R2978, R2979, R2980, R2981, R2982, R2983, R2984, R2985, R2986, R2987, R2988, R2989, R2990, R2991, R2992, R2993, R2994, R2995, R2996, R2997, R2998, R2999, R3000, R3001, R3002, R3003, R3004, R3005, R3006, R3007, R3008, R3009, R3010, R3011, R3012, R3013, R3014, R3015, R3016, R3017, R3018, R3019, R3020, R3021, R3022, R3023, R3024, R3025, R3026, R3027, R3028, R3029, R3030, R3031, R3032, R3033, R3034, R3035, R3036, R3037, R3038, R3039, R3040, R3041, R3042, R3043, R3044, R3045, R3046, R3047, R3048, R3049, R3050, R3051, R3052, R3053, R3054, R3055, R3056, R3057, R3058, R3059, R3060, R3061, R3062, R3063, R3064, R3065, R3066, R3067, R3068, R3069, R3070, R3071, R3072, R3073, R3074, R3075, R3076, R3077, R3078, R3079, R3080, R3081, R3082, R3083, R3084, R3085, R3086, R3087, R3088, R3089, R3090, R3091, R3092, R3093, R3094, R3095, R3096, R3097, R3098, R3099, R3100, R3101, R3102, R3103, R3104, R3105, R3106, R3107, R3108, R3109, R3110, R3111, R3112, R3113, R3114, R3115, R3116, R3117, R3118, R3119, R3120, R3121, R3122, R3123, R3124, R3125, R3126, R3127, R3128, R3129, R3130, R3131, R3132, R3133, R3134, R3135, R3136, R3137, R3138, R3139, R3140, R3141, R3142, R3143, R3144, R3145, R3146, R3147, R3148, R3149, R3150, R3151, R3152, R3153, R3154, R3155, R3156, R3157, R3158, R3159, R3160, R3161, R3162, R3163, R3164, R3165, R3166, R3167, R3168, R3169, R3170, R3171, R3172, R3173, R3174, R3175, R3176, R3177, R3178, R3179, R3180, R3181, R3182, R3183, R3184, R3185, R3186, R3187, R3188, R3189, R3190, R3191, R3192, R3193, R3194, R3195, R3196, R3197, R3198, R3199, R3200, R3201, R3202, R3203, R3204, R3205, R3206, R3207, R3208, R3209, R3210, R3211, R3212, R3213, R3214, R3215, R3216, R3217, R3218, R3219, R3220, R3221, R3222, R3223, R3224, R3225, R3226, R3227, R3228, R3229, R3230, R3231, R3232, R3233, R3234, R3235, R3236, R3237, R3238, R3239, R3240, R3241, R3242, R3243, R3244, R3245, R3246, R3247, R3248, R3249, R3250, R3251, R3252, R3253, R3254, R3255, R3256, R3257, R3258, R3259, R3260, R3261, R3262, R3263, R3264, R3265, R3266, R3267, R3268, R3269, R3270, R3271, R3272, R3273, R3274, R3275, R3276, R3277, R3278, R3279, R3280, R3281, R3282, R3283, R3284, R3285, R3286, R3287, R3288, R3289, R3290, R3291, R3292, R3293, R3294, R3295, R3296, R3297, R3298, R3299, R3300, R3301, R3302, R3303, R3304, R3305, R3306, R3307, R3308, R3309, R3310, R3311, R3312, R3313, R3314, R3315, R3316, R3317, R3318, R3319, R3320, R3321, R3322, R3323



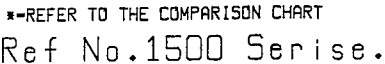




SUB POWER SCHEMATIC DIAGRAM (E3: Page CBA-5) 11/11

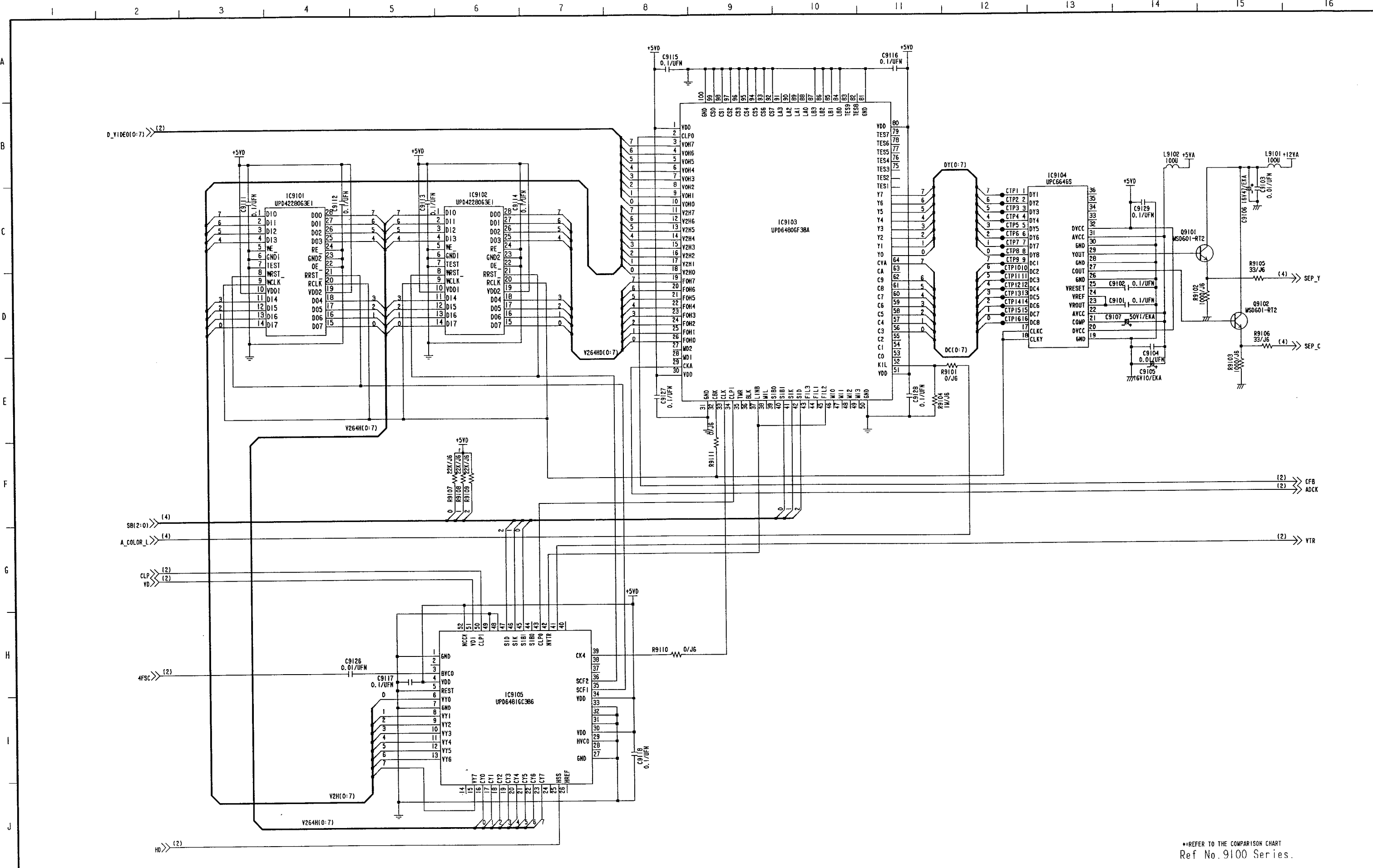








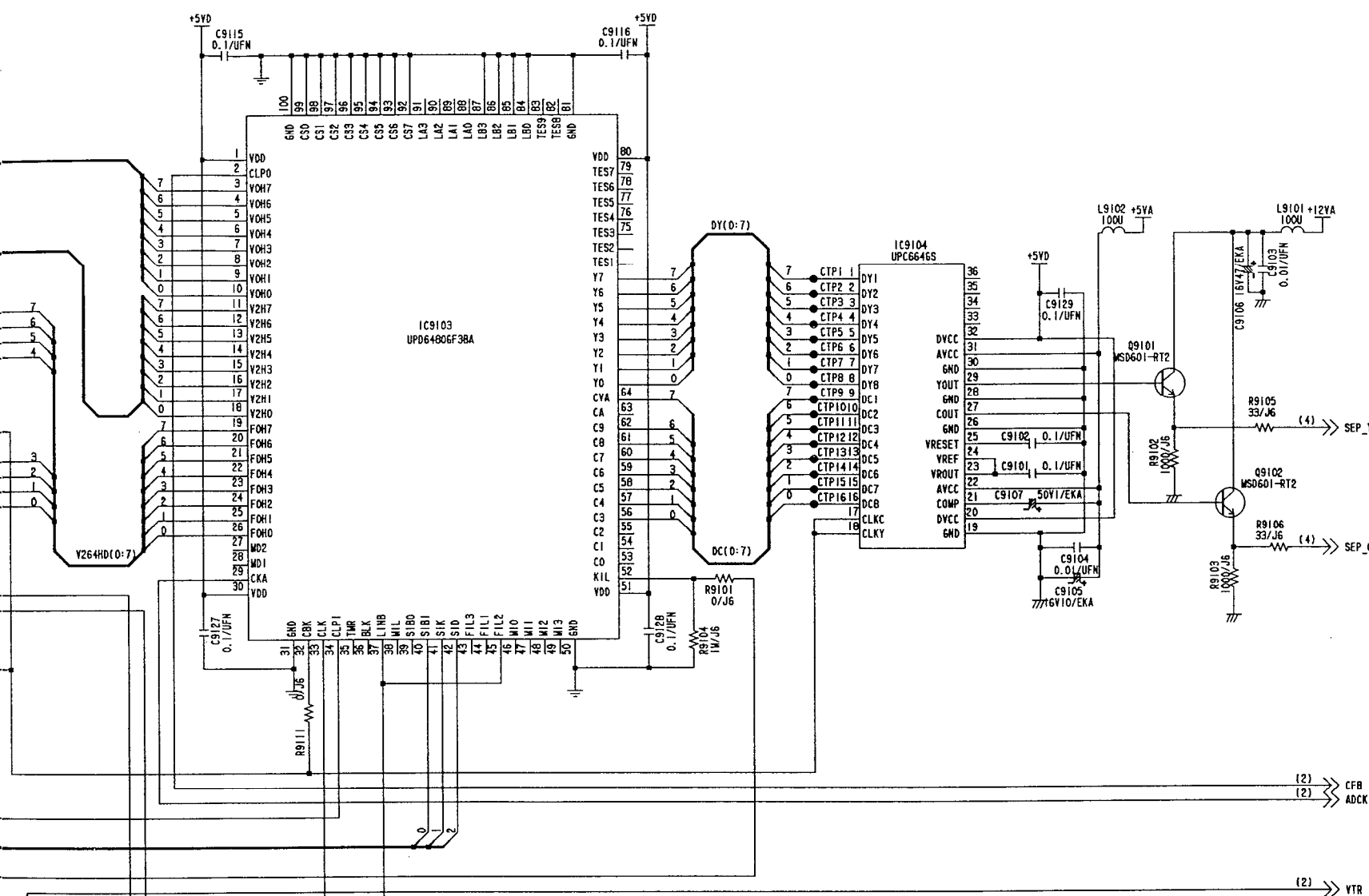
VIDEO C-1 SCHEMATIC DIAGRAM (E13: Page CBA-6) 1/5



•REFER TO THE COMPARISON CHART  
Ref No.9100 Series.

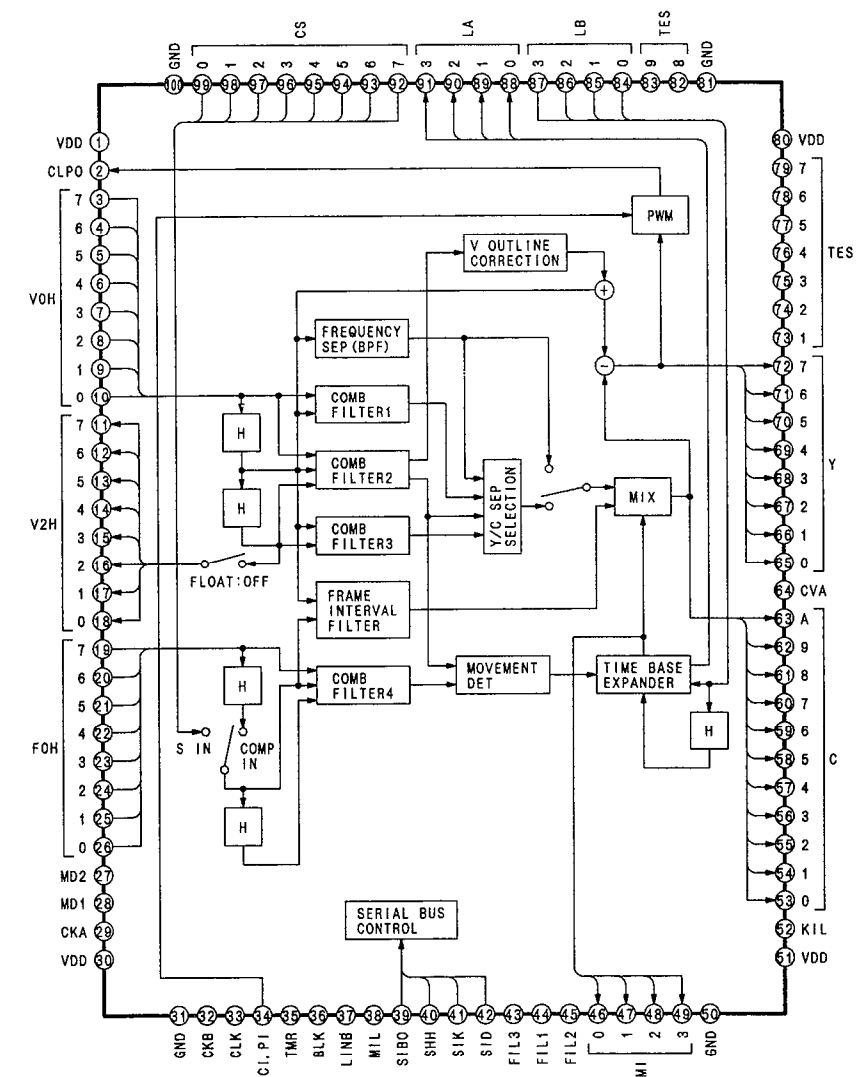


7 8 9 10 11 12 13 14 15 16

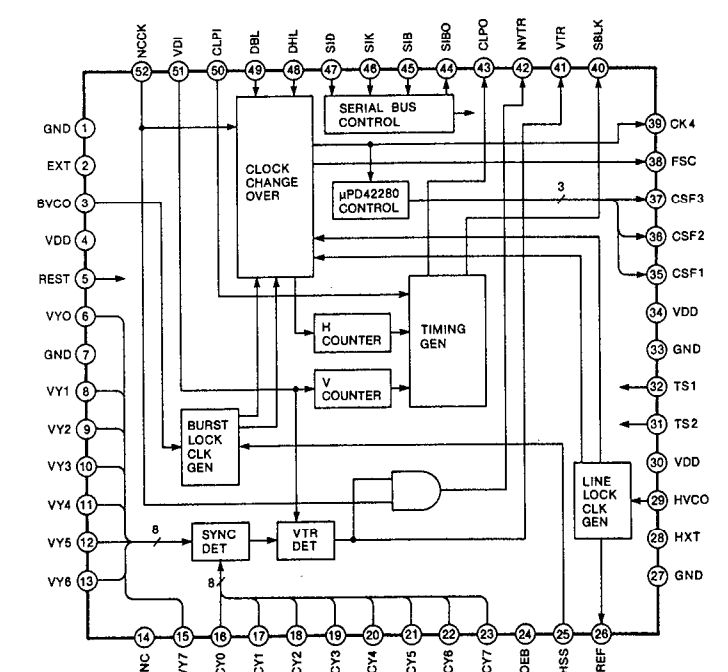


•REFER TO THE COMPARISON CHART  
Ref No.9100 Series.

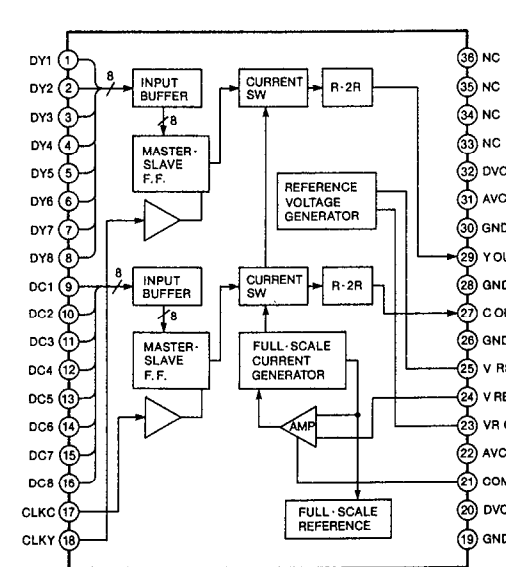
# IC9103 uPD6480GF38A



# IC9105 uPD6481GC386

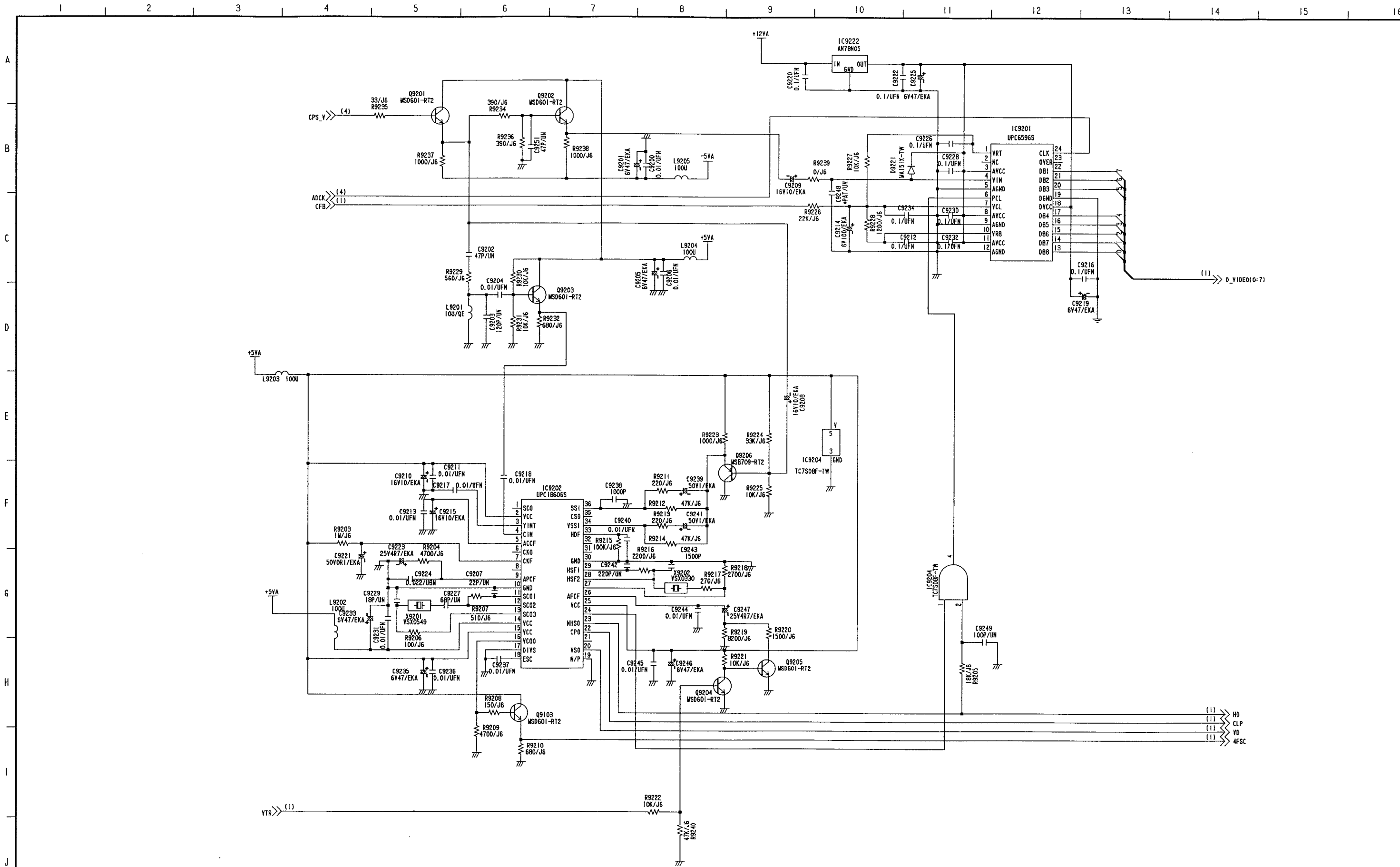


# IC9104 uPC664GS



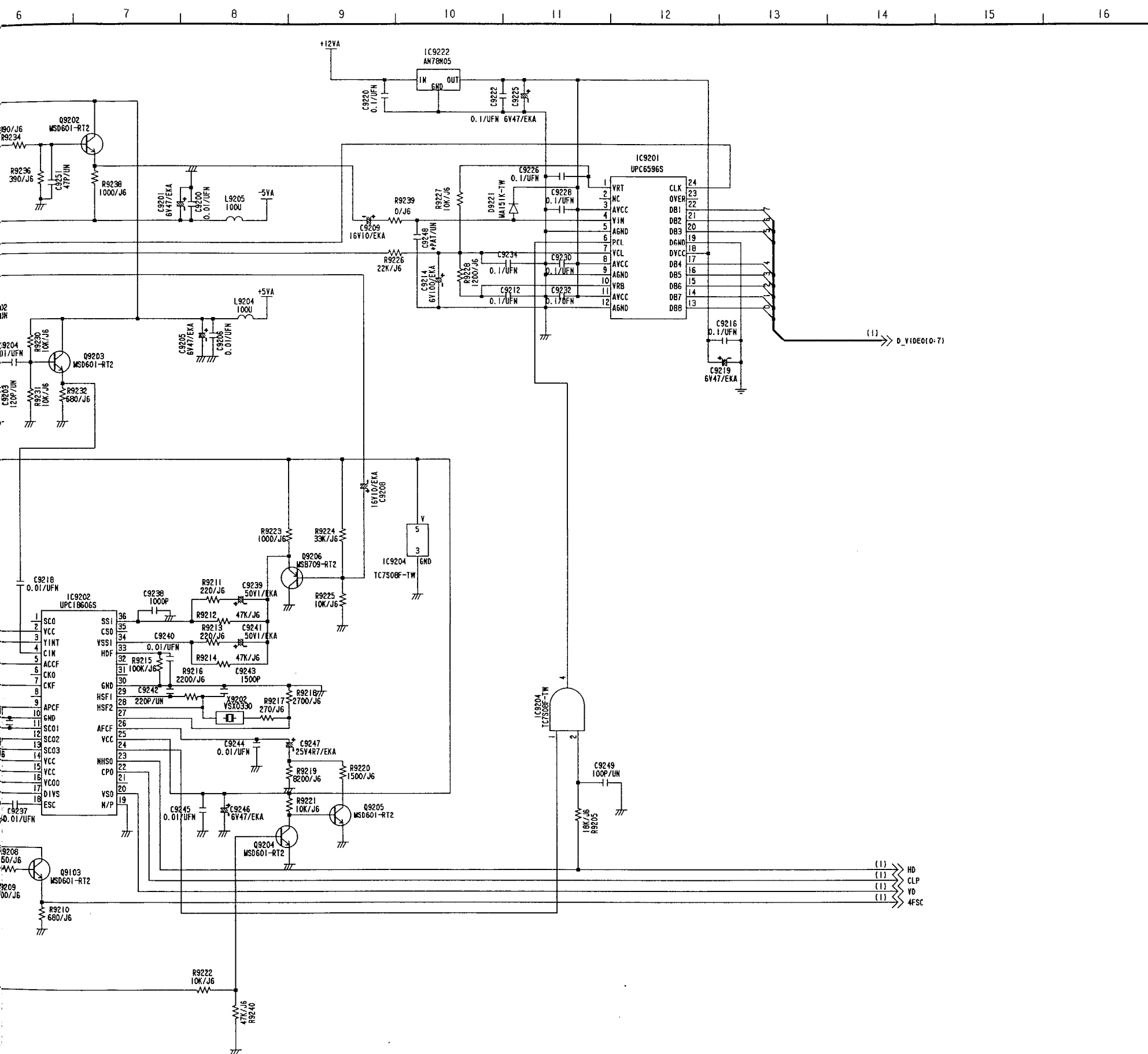


VIDEO C-2 SCHEMATIC DIAGRAM (E13: Page CBA-6) 2/5

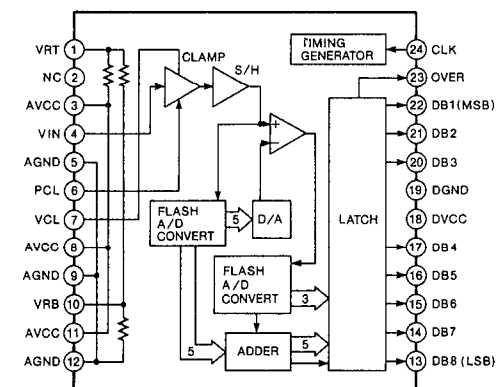


\*REFER TO THE COMPARISON CHART  
Ref No.9200 Series.

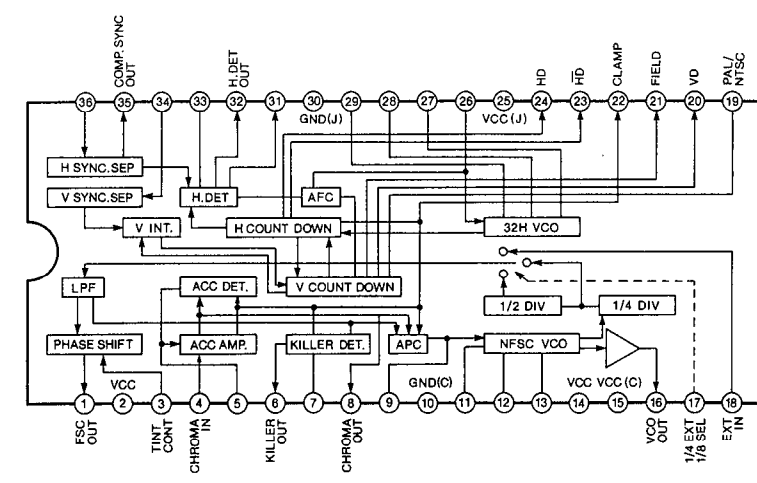




IC9201  
uPC6596S

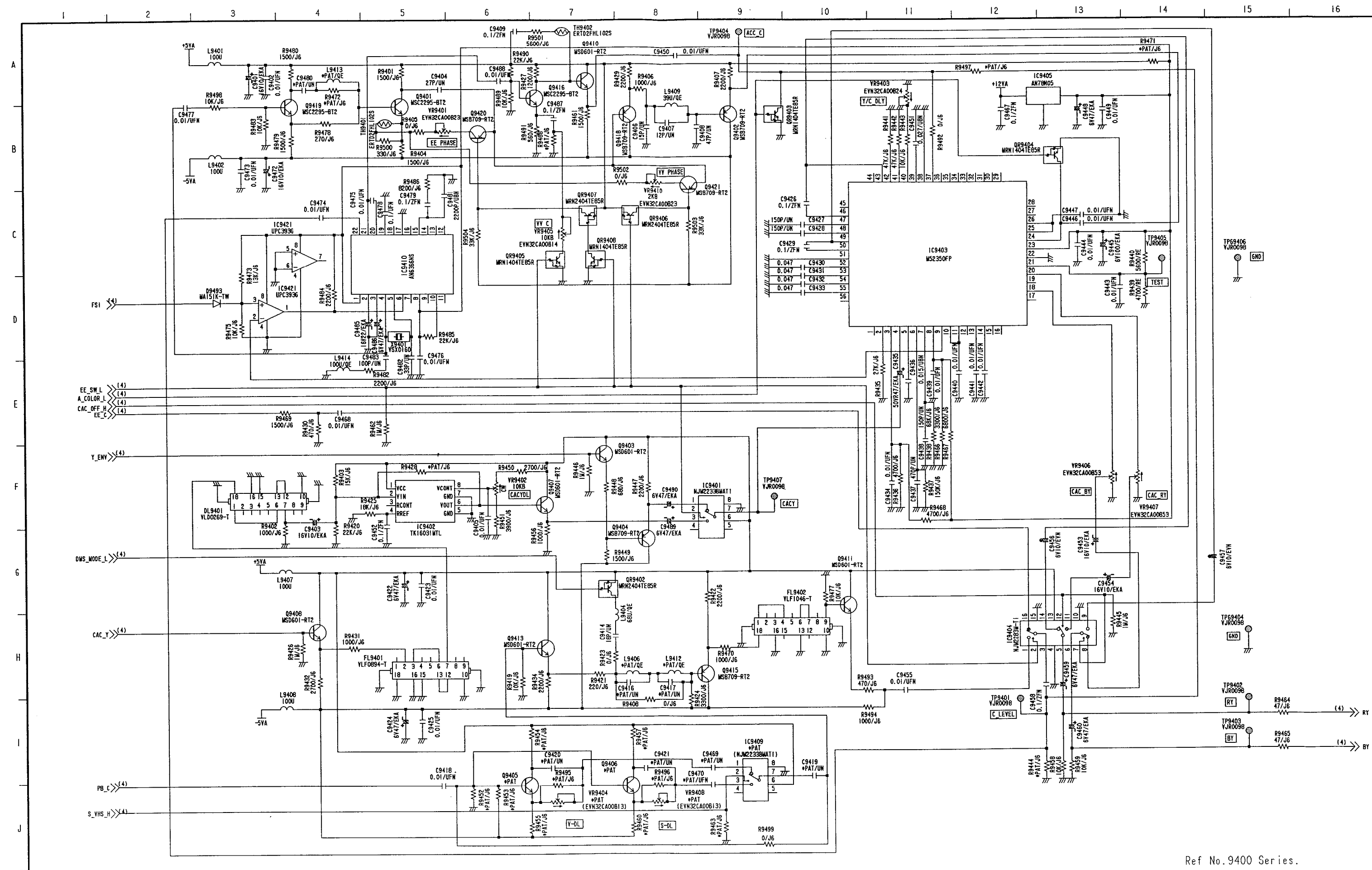


IC9202  
uPC18606S





# VIDEO C-3 SCHEMATIC DIAGRAM (E13: Page CBA-6) 3/5

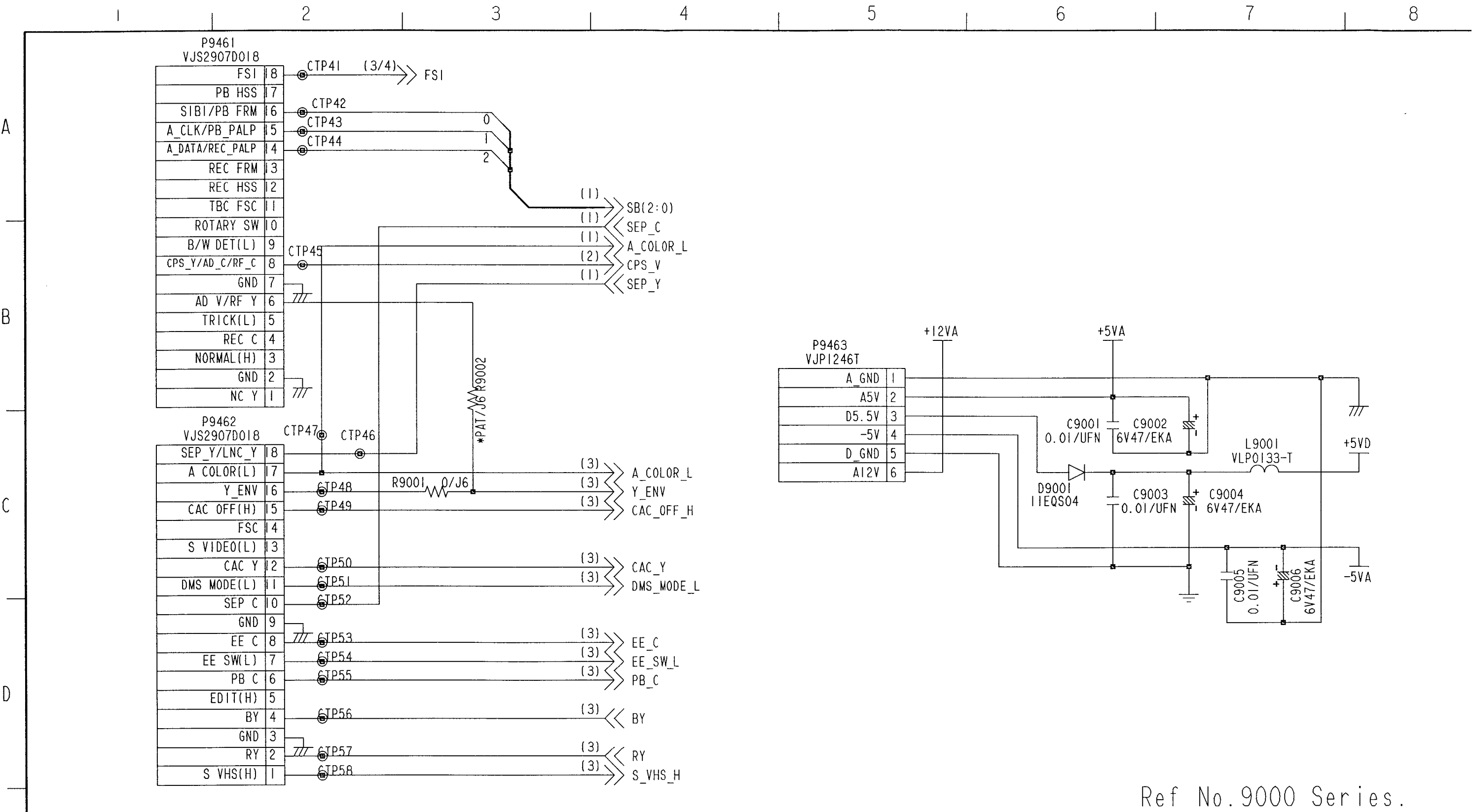






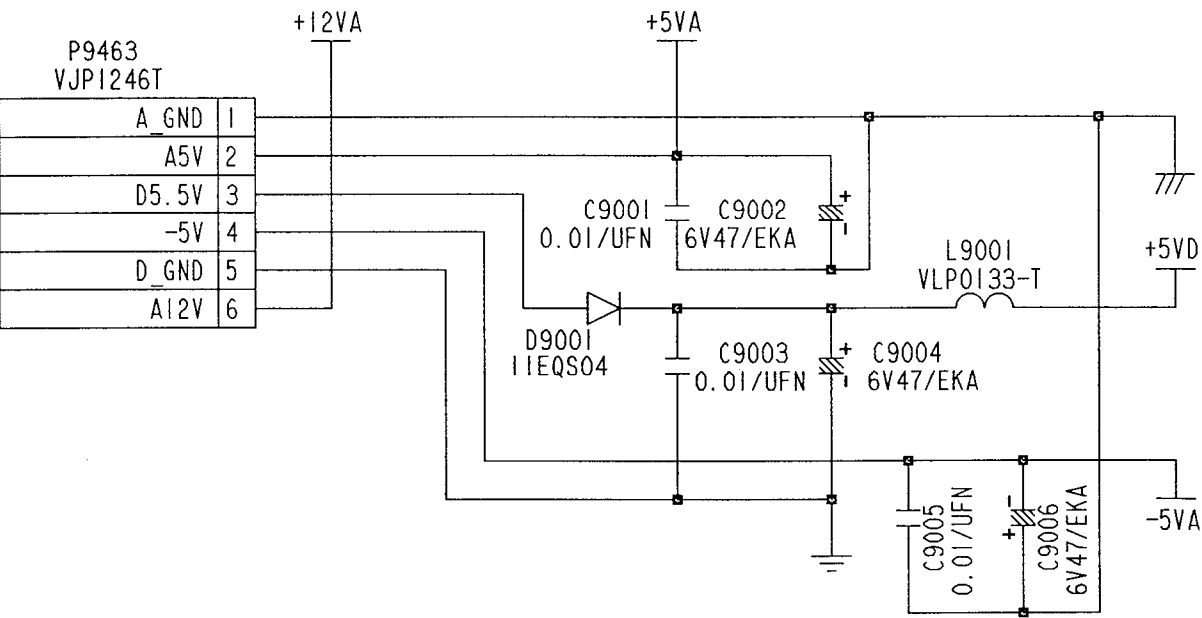
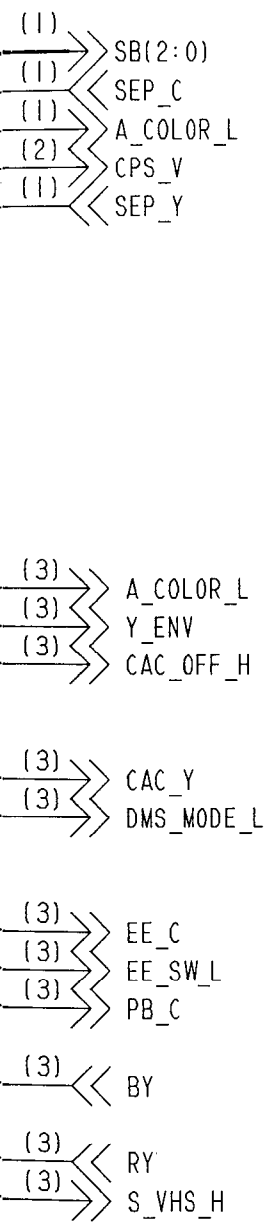


VIDEO C-4 SCHEMATIC DIAGRAM (E13: Page CBA-6) 4/5



Ref No.9000 Series.





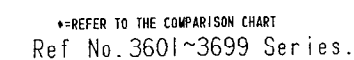
Ref No.9000 Series.

\$REF\$	NTSC	PAL	ON
C9248	*PAT/UFN	*PAT/UFN	0.1/UFN
C9416	*PAT/UFN	*PAT/UFN	0.1/UFN
C9417	*PAT/UFN	*PAT/UFN	0.1/UFN
C9419	*PAT/UFN	*PAT/UFN	0.01/UFN
C9420	*PAT/UFN	*PAT/UFN	150P/UN
C9421	*PAT/UFN	*PAT/UFN	150P/UN
C9469	*PAT/UFN	*PAT/UFN	0.01/UFN
C9470	*PAT/UFN	*PAT/UFN	0.01/UFN
C9480	*PAT/UFN	*PAT/UFN	0.1/UFN
IC9409	*PAT	*PAT	NJM2233BMAT1
L9406	*PAT/QE	*PAT/QE	100/QE
L9412	*PAT/QE	*PAT/QE	100/QE
L9413	*PAT/QE	*PAT/QE	100/QE
Q9405	*PAT	*PAT	MSC2295-BT2
Q9406	*PAT	*PAT	MSC2295-BT2
R9002	*PAT/J6	*PAT/J6	0/J6
R9428	*PAT/J6	*PAT/J6	0/J6
R9444	*PAT/J6	*PAT/J6	0/J6
R9452	*PAT/J6	*PAT/J6	10K/J6
R9453	*PAT/J6	*PAT/J6	0/J6
R9454	*PAT/J6	*PAT/J6	1500/J6
R9455	*PAT/J6	*PAT/J6	1500/J6
R9457	*PAT/J6	*PAT/J6	1500/J6
R9460	*PAT/J6	*PAT/J6	1500/J6
R9463	*PAT/J6	*PAT/J6	1M/J6
R9471	*PAT/J6	*PAT/J6	0/J6
R9472	*PAT/J6	*PAT/J6	0/J6
R9488	*PAT/J6	*PAT/J6	0/J6
R9495	*PAT/J6	*PAT/J6	470/J6
R9496	*PAT/J6	*PAT/J6	470/J6
R9497	*PAT/J6	*PAT/J6	0/J6
VR9404	*PAT	*PAT	EVN32CA00B13
VR9408	*PAT	*PAT	EVN32CA00B13



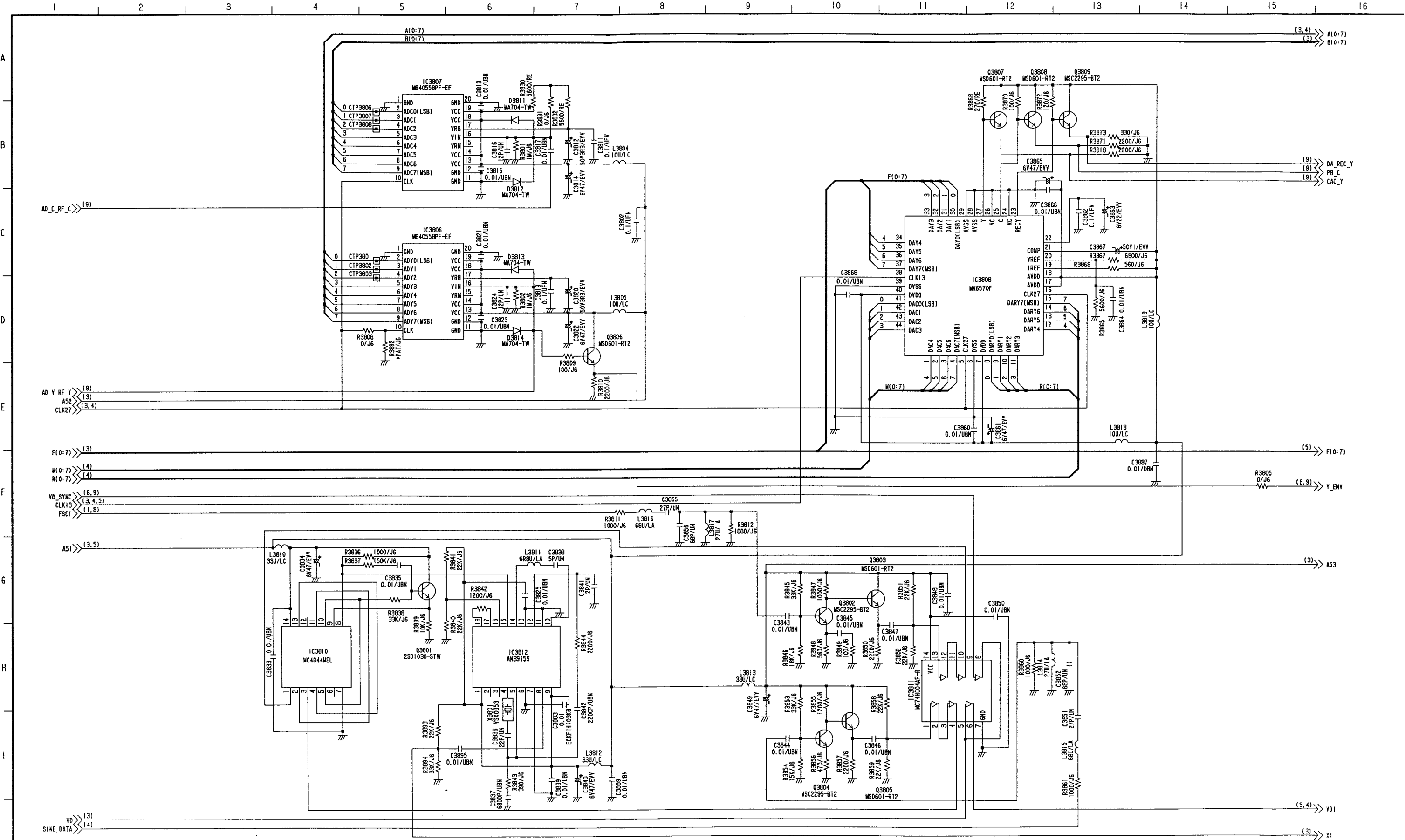






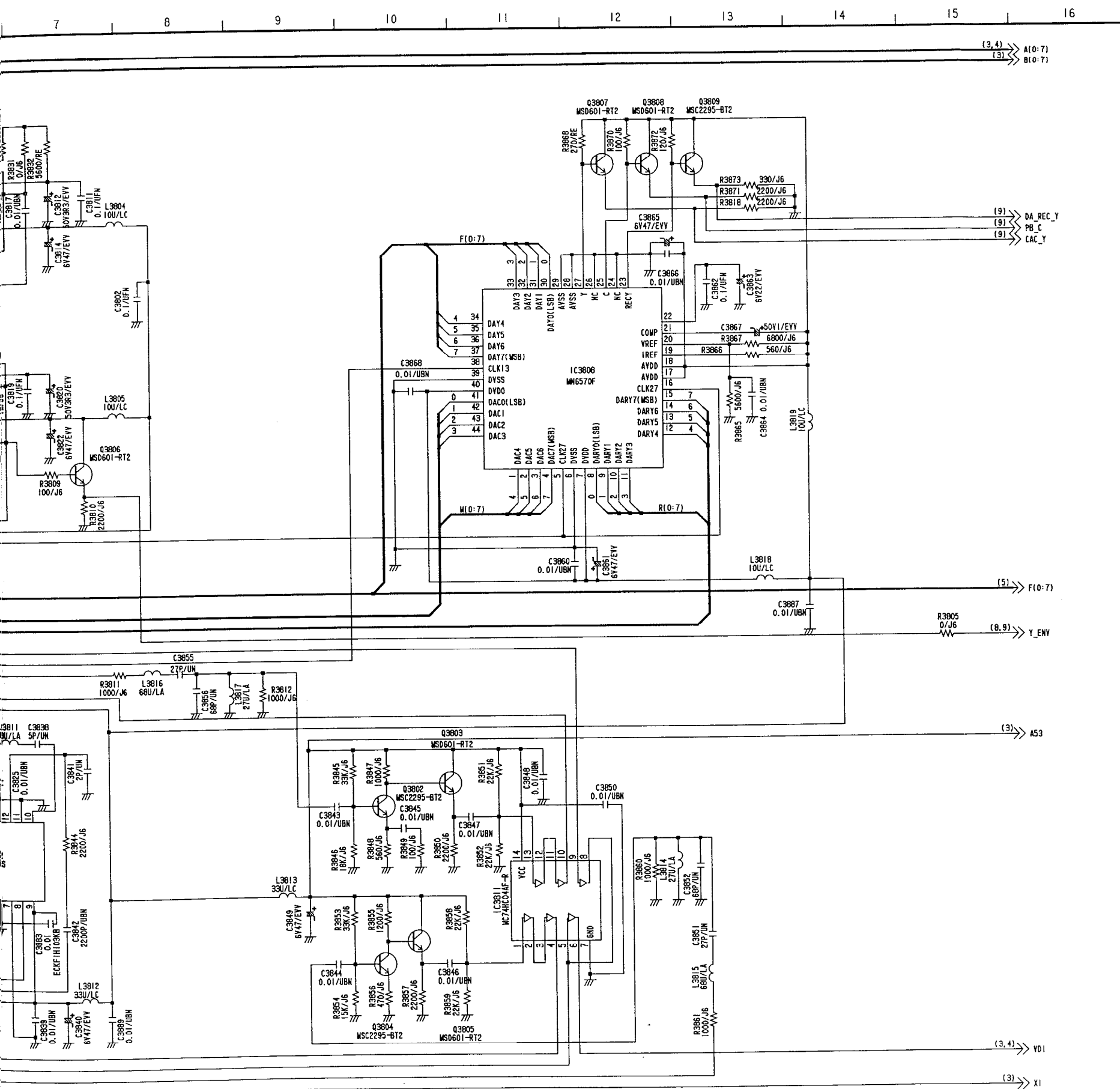


VIDEO DIGITAL-2 SCHEMATIC DIAGRAM (E6: Page CBA-7) 2/10

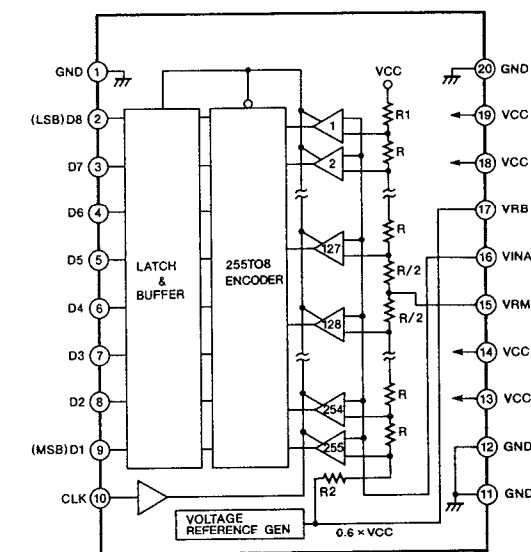


\*-REFER TO THE COMPARISON CHART  
Ref No. 3801~3899 Series.

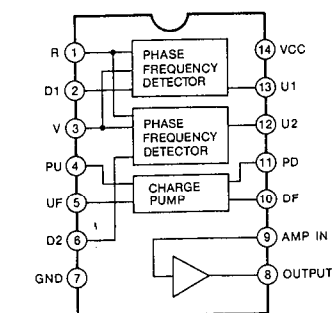




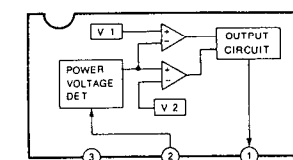
IC3806,3807  
MB40558PF-EF



IC3810  
MC4044MEL

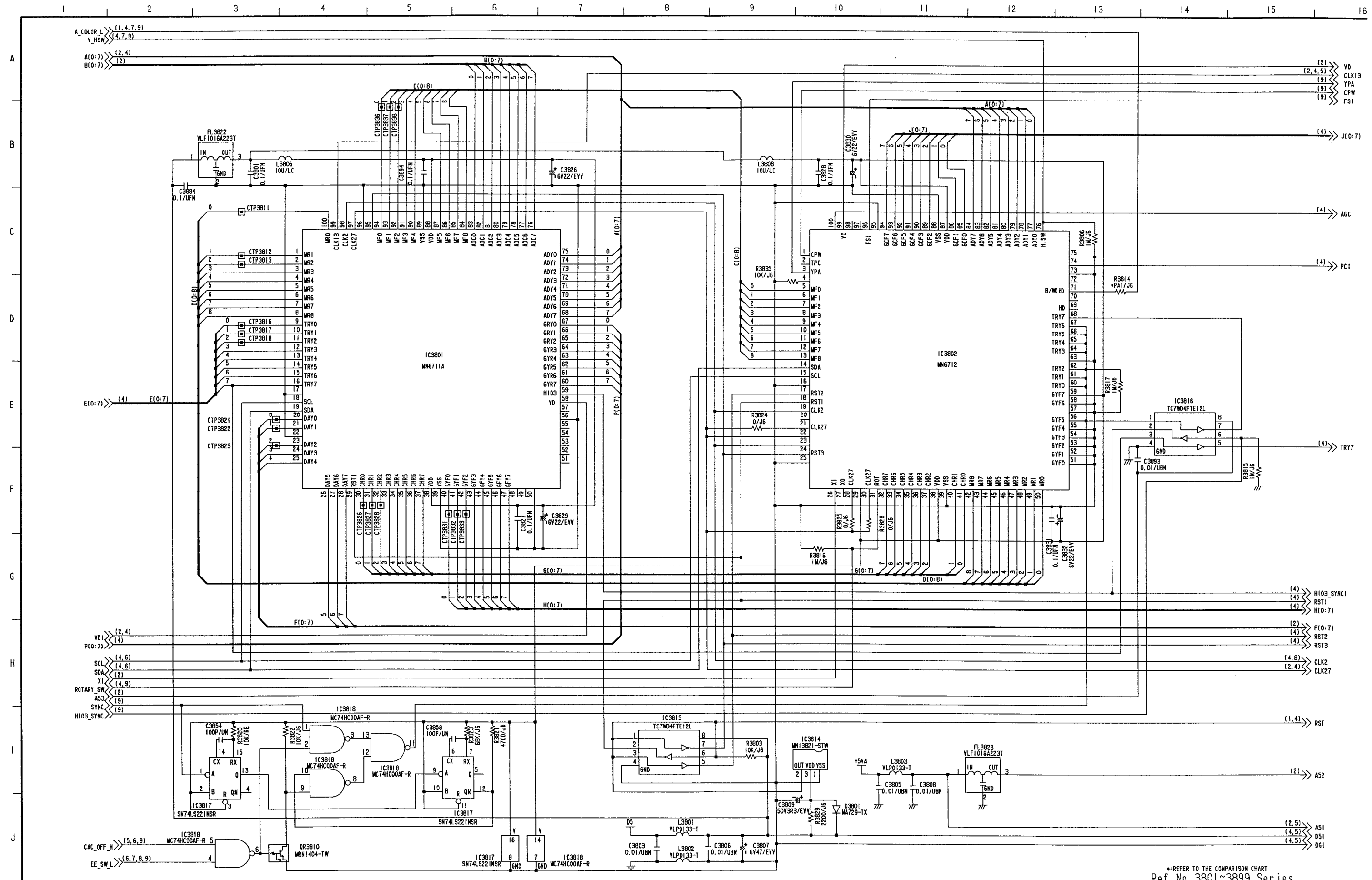


IC3814  
MN13821-STW





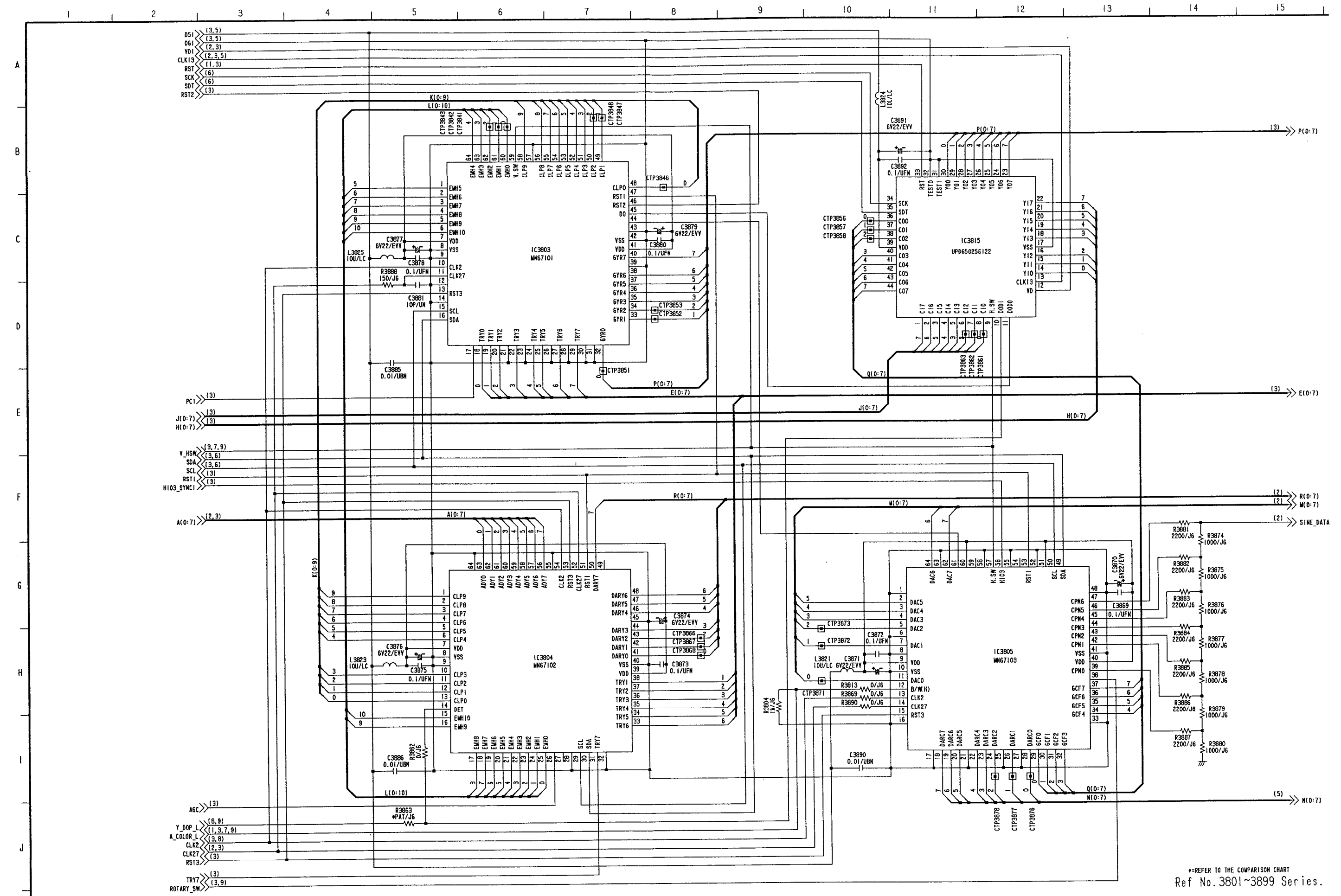
# VIDEO DIGITAL-3 SCHEMATIC DIAGRAM (E6: Page CBA-7) 3/10



Ref No. 3801~3899 Series.

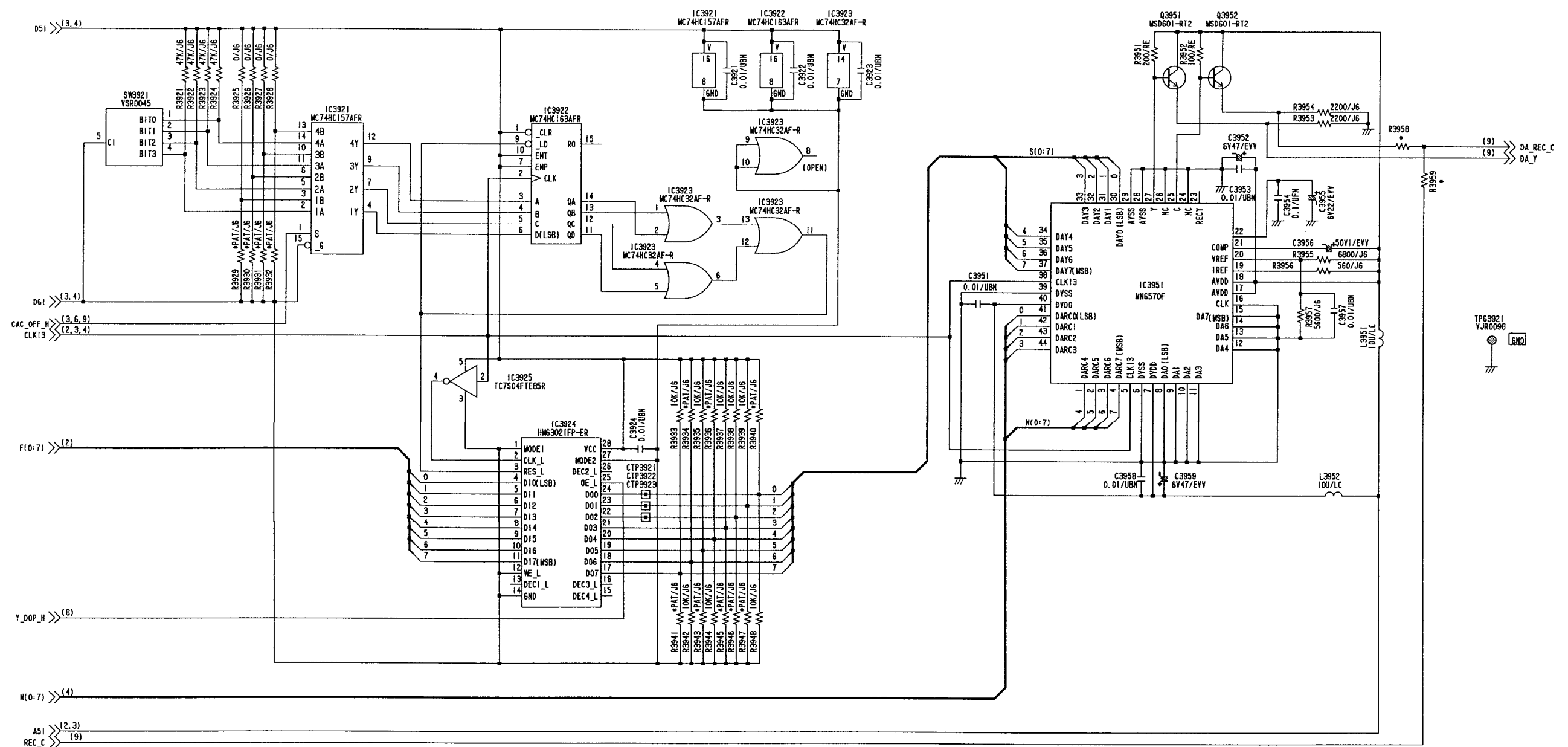


# VIDEO DIGITAL-4 SCHEMATIC DIAGRAM (E6: Page CBA-7) 4/10

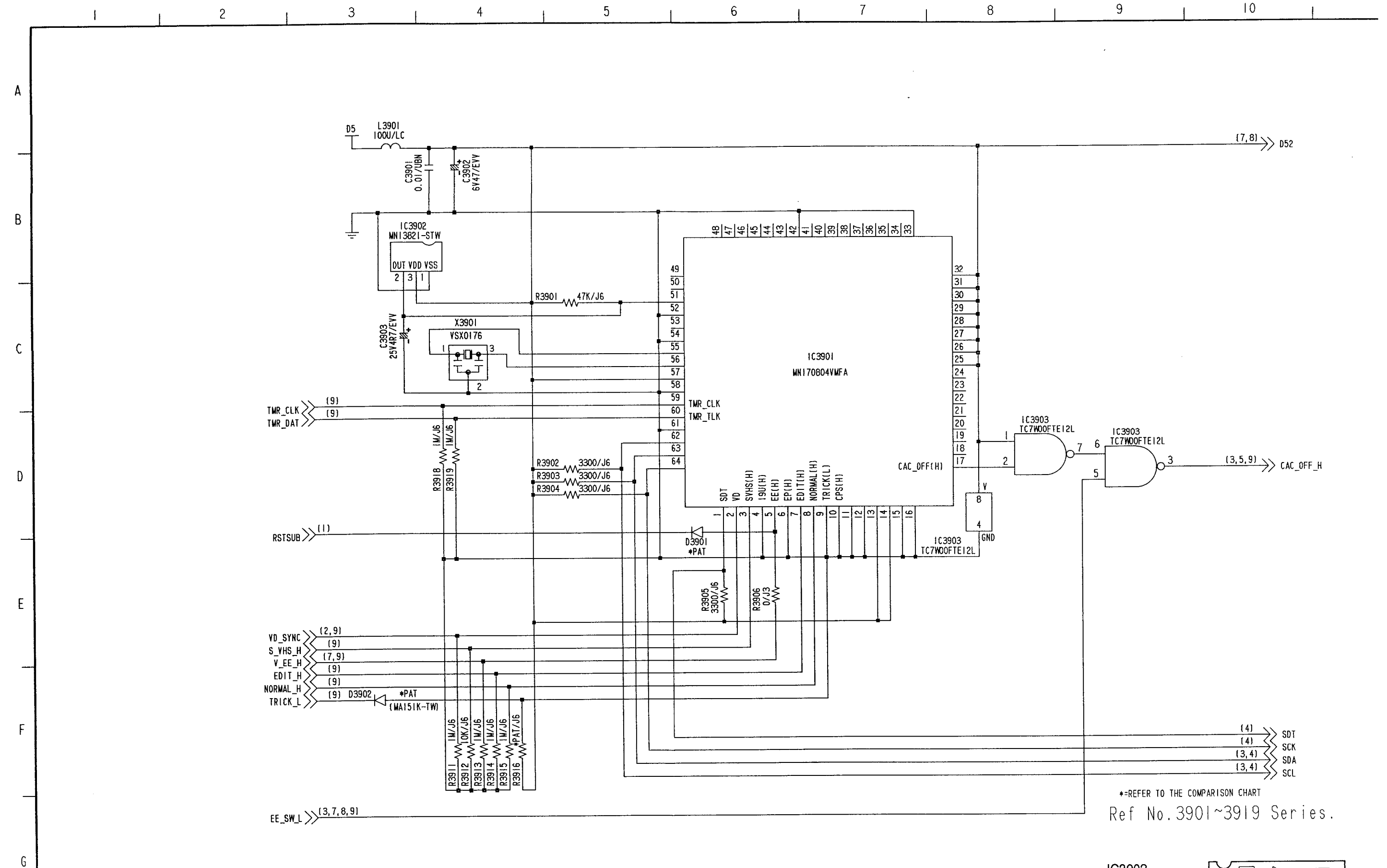


==REFER TO THE COMPARISON CHART  
Ref. No. 3801~3899 Series.



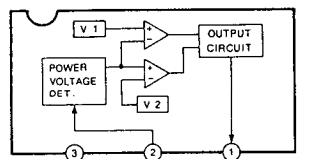






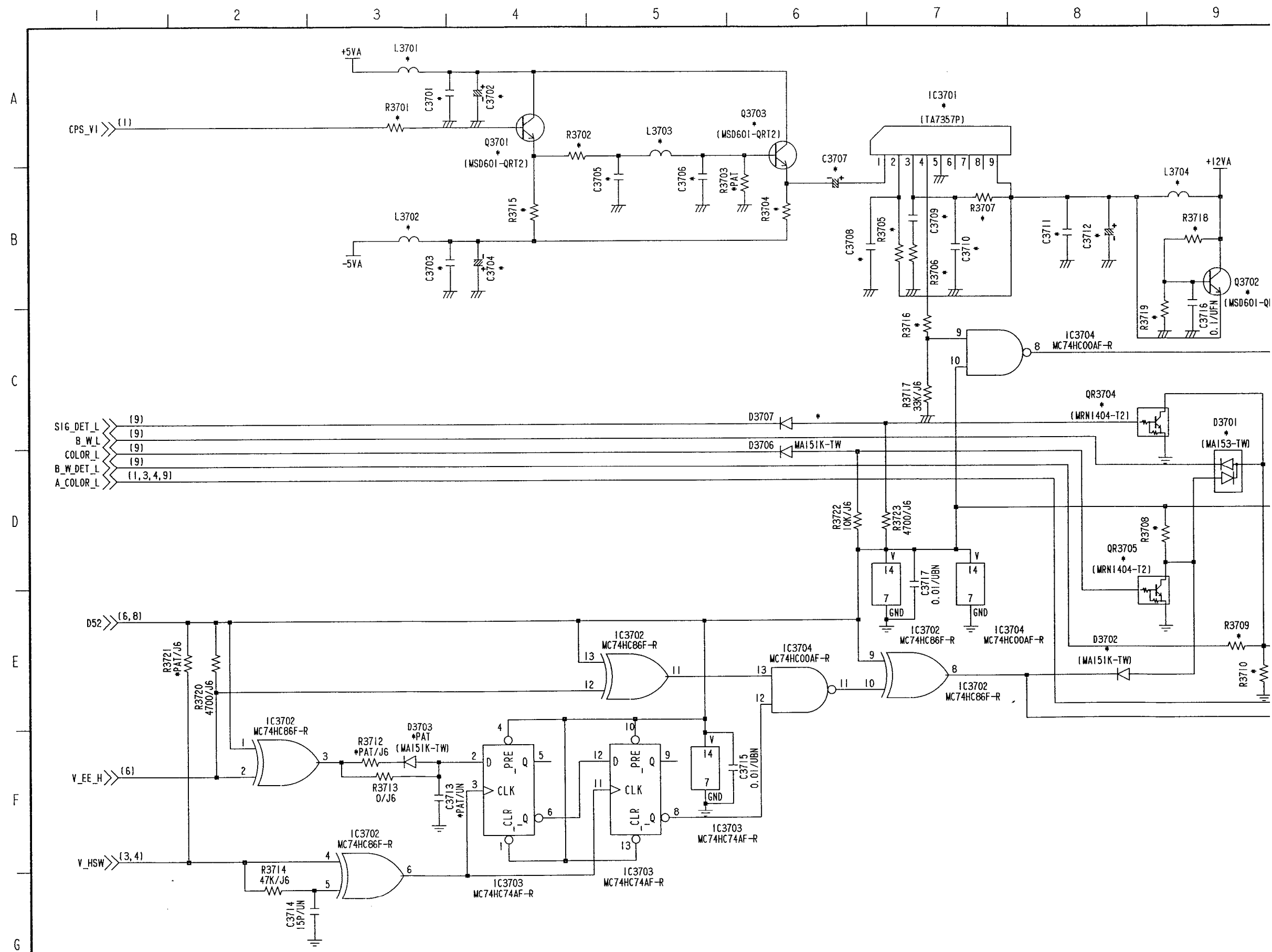
\*REFER TO THE COMPARISON CHART  
Ref No.3901~3919 Series.

IC3902  
MN13821-STW

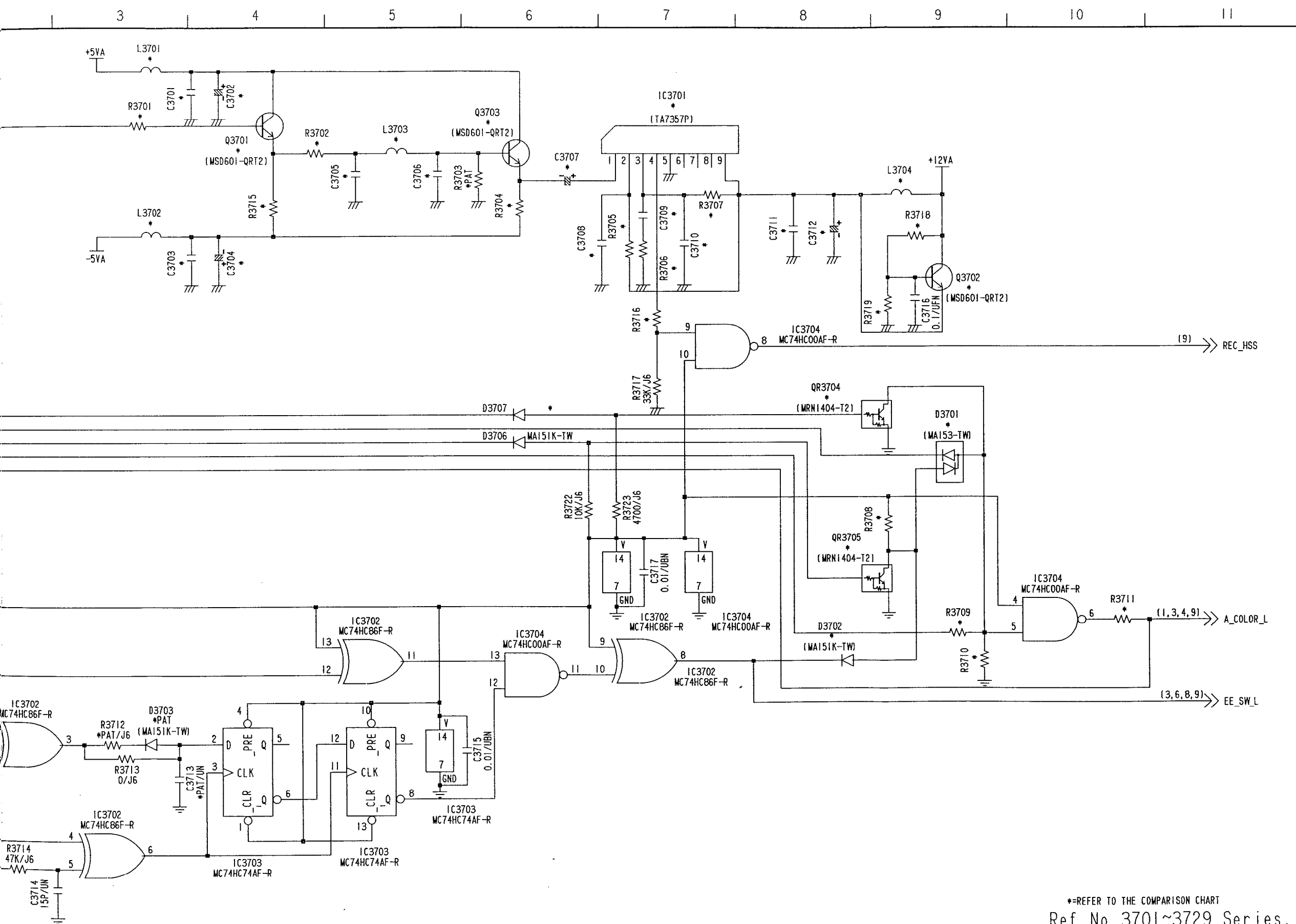




# VIDEO DIGITAL-7 SCHEMATIC DIAGRAM (E6: Page CBA-7) 7/10



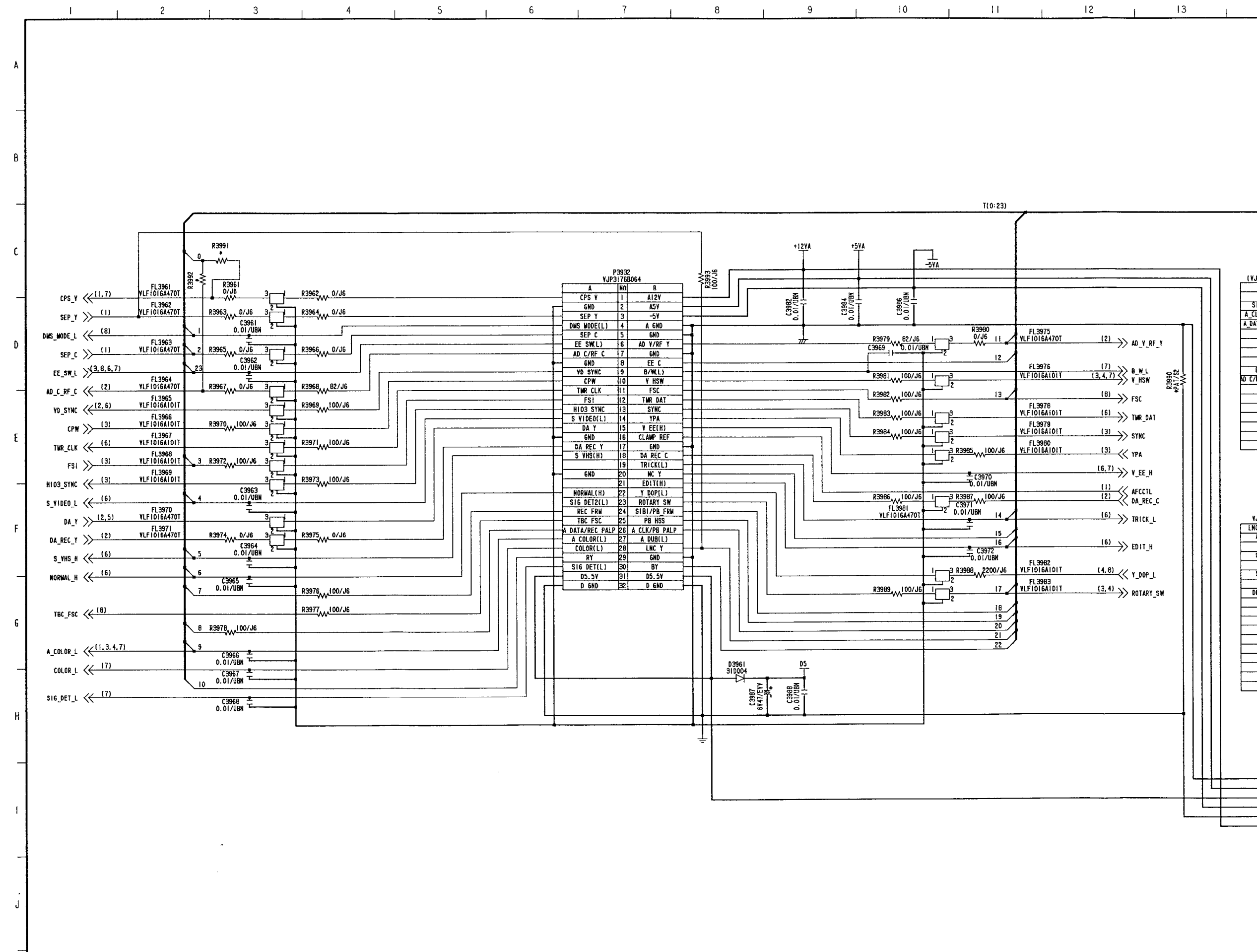




REFER TO THE COMPARISON CHART  
Ref No. 3701~3729 Series.



# VIDEO DIGITAL-9 SCHEMATIC DIAGRAM (E6: Page CBA-7) 9/10



(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

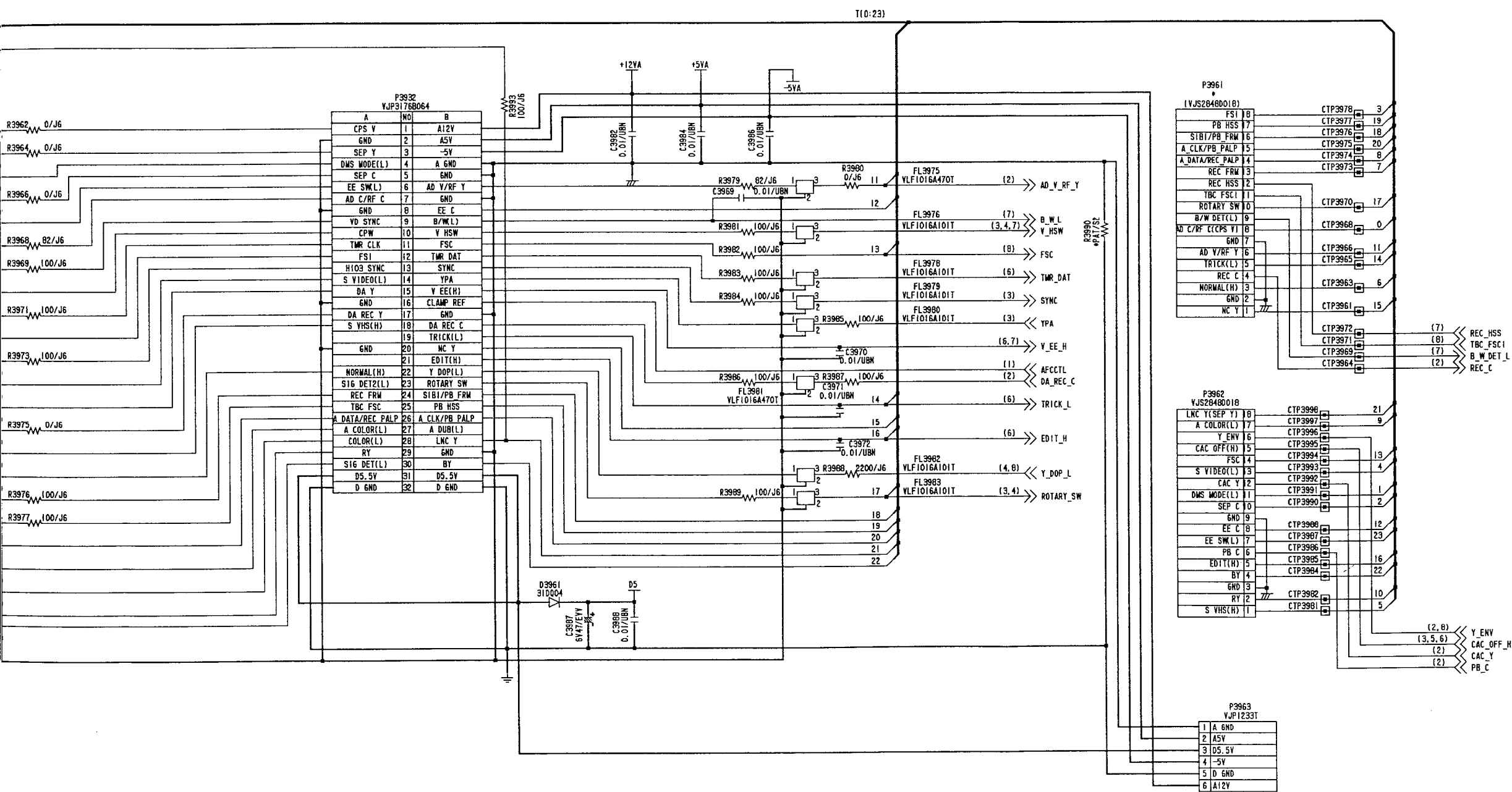
(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S  
 DM

VJ  
 LNC  
 A  
 C  
 S  
 DM

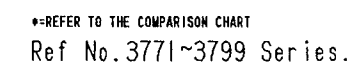
(VJS  
 SI  
 A CLI  
 A DAT  
 B  
 AD C/R  
 VJ  
 LNC  
 A  
 C  
 S



4 5 6 7 8 9 10 11 12 13 14 15 16









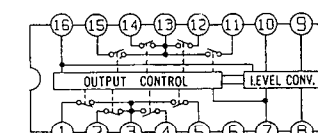
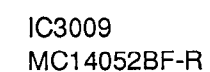
# VIDEO DIGITAL COMPARISON CHART (E6: Page CBA-7)

\$REF\$	NTSC	PAL	ON	\$REF\$	NTSC	PAL	ON	\$REF\$	NTSC	PAL	ON
C3615	0.1/UFN	0.1/UFN	0.1/UFN	L3703	270U/LB	270U/LB	270U/LB	R3711	*PAT/J6	*PAT/J6	0/J6
C3617	0.1/UFN	0.1/UFN	0.1/UFN	L3704	*PAT/LC	*PAT/LC	100U/LC	R3712	*PAT/J6	*PAT/J6	0/J6
C3650	*PAT/UN	*PAT/UN	0.1/UFN	P3961	VJS2848D018	VJS2848D018	VJS2848D018	R3715	2200/J6	2200/J6	2200/J6
C3653	*PAT/UN	*PAT/UN	470P/UN	Q3701	MSD601-QRT2	MSD601-QRT2	MSD601-QRT2	R3716	6800/J6	6800/J6	6800/J6
C3654	16V10/EVV	16V10/EVV	16V10/EVV	Q3702	MSD601-QRT2	MSD601-QRT2	MSD601-QRT2	R3718	1000/J6	1000/J6	1000/J6
C3655	6V47/EVV	6V47/EVV	6V47/EVV	Q3703	MSD601-QRT2	MSD601-QRT2	MSD601-QRT2	R3719	3300/J6	3300/J6	3300/J6
C3659	*PAT/UN	*PAT/UN	470P/UN	Q3782	*PAT	*PAT	MSD601-QRT2	R3721	*PAT/J6	*PAT/J6	0/J6
C3675	6P/UN	5P/UN	6P/UN	QR3704	MRN1404TE85R	MRN1404TE85R	MRN1404TE85R	R3785	*PAT/J6	*PAT/J6	0/J6
C3691	120P/UN	100P/UN	120P/UN	QR3705	MRN1404TE85R	MRN1404TE85R	MRN1404TE85R	R3787	*PAT/J6	*PAT/J6	0/J6
C3692	120P/UN	180P/UN	120P/UN	QR3771	*PAT	*PAT	MRN1404TE85R	R3796	*PAT/J6	*PAT/J6	0/J6
C3694	120P/UN	180P/UN	120P/UN	R3601	0/J6	*PAT/J6	0/J6	R3797	*PAT/J6	*PAT/J6	0/J6
C3695	120P/UN	*PAT/UN	120P/UN	R3602	*PAT/J6	0/J6	0/J6	R3798	*PAT/J6	*PAT/J6	0/J6
C3696	120P/UN	*PAT/UN	120P/UN	R3603	0/J6	*PAT/J6	0/J6	R3814	*PAT/J6	*PAT/J6	0/J6
C3701	0.01/UBN	0.01/UBN	0.01/UBN	R3604	*PAT/J6	0/J6	0/J6	R3863	*PAT/J6	*PAT/J6	0/J6
C3702	6V47/EVV	6V47/EVV	6V47/EVV	R3605	0/J6	0/J6	0/J6	R3892	*PAT/J6	*PAT/J6	0/J6
C3703	0.01/UBN	0.01/UBN	0.01/UBN	R3606	*PAT/J6	*PAT/J6	0/J6	R3916	*PAT/J6	*PAT/J6	10K/J6
C3704	6V47/EVV	6V47/EVV	6V47/EVV	R3611	*PAT/J6	*PAT/J6	0/J6	R3929	*PAT/J6	*PAT/J6	0/J6
C3705	100P/UN	100P/UN	100P/UN	R3621	*PAT/J6	*PAT/J6	0/J6	R3930	*PAT/J6	*PAT/J6	0/J6
C3706	270P/UN	270P/UN	270P/UN	R3622	*PAT/J6	*PAT/J6	0/J6	R3931	*PAT/J6	*PAT/J6	0/J6
C3707	6V47/EVV	6V47/EVV	6V47/EVV	R3624	*PAT/J6	*PAT/J6	0/J6	R3932	*PAT/J6	*PAT/J6	0/J6
C3708	0.1/UFN	0.1/UFN	0.1/UFN	R3627	*PAT/J6	*PAT/J6	0/J6	R3934	*PAT/J6	*PAT/J6	0/J6
C3709	0.047/UBN	0.047/UBN	0.047/UBN	R3628	*PAT/J6	*PAT/J6	0/J6	R3936	*PAT/J6	*PAT/J6	0/J6
C3710	560P/UN	560P/UN	560P/UN	R3630	*PAT/J6	*PAT/J6	0/J6	R3940	*PAT/J6	*PAT/J6	0/J6
C3711	0.01/UBN	0.01/UBN	0.01/UBN	R3653	*PAT/J6	*PAT/J6	0/J6	R3941	*PAT/J6	*PAT/J6	0/J6
C3712	16V47/EVV	16V47/EVV	16V47/EVV	R3654	*PAT/J6	*PAT/J6	0/J6	R3943	*PAT/J6	*PAT/J6	0/J6
C3713	*PAT/UN	*PAT/UN	470P/UN	R3655	*PAT/J6	*PAT/J6	0/J6	R3945	*PAT/J6	*PAT/J6	0/J6
D3701	MA153-TW	MA153-TW	MA153-TW	R3657	*PAT/J6	*PAT/J6	0/J6	R3946	*PAT/J6	*PAT/J6	0/J6
D3702	MA151K-TW	MA151K-TW	MA151K-TW	R3658	0/J6	0/J6	0/J6	R3947	*PAT/J6	*PAT/J6	0/J6
D3703	*PAT	*PAT	MA151K-TW	R3660	*PAT/J6	*PAT/J6	0/J6	R3958	0/J6	*PAT/J6	0/J6
D3707	*PAT	MA151K-TW	MA151K-TW	R3662	*PAT/J6	*PAT/J6	0/J6	R3959	*PAT/J6	0/J6	0/J6
D3901	*PAT	*PAT	MA151K-TW	R3663	*PAT/J6	*PAT/J6	0/J6	R3990	*PAT/J6	*PAT/J6	0/J6
D3902	*PAT	*PAT	MA151K-TW	R3670	*PAT/J6	*PAT/J6	0/J6	R3991	*PAT/J6	*PAT/J6	0/J6
IC3601	*PAT	CXD2105AQ	CXD2105AQ	R3672	3900/J6	3300/J6	3900/J6	R3992	*PAT/J6	0/J6	0/J6
IC3603	AN78L05	AN78L05	AN78L05	R3690	*PAT/J6	*PAT/J6	0/J6				
IC3606	*PAT	TC7W04FTE12L	TC7W04FTE12L	R3692	*PAT/J6	*PAT/J6	0/J6				
IC3607	*PAT	MC74HC163AFR	MC74HC163AFR	R3701	100/J6	100/J6	100/J6				
IC3655	*PAT	CXD1175AM-T1	CXD1175AM-T1	R3702	1000/J6	1000/J6	1000/J6				
IC3671	*PAT	MST003MS	MST003MS	R3703	*PAT/J6	*PAT/J6	1000/J6				
IC3701	TA7357P	TA7357P	TA7357P	R3704	2200/J6	2200/J6	2200/J6				
L3602	*PAT/LC	*PAT/LC	100U/LC	R3705	120K/J6	120K/J6	120K/J6				
L3691	3R3U/LA	2R7U/LA	3R3U/LA	R3706	12K/J6	12K/J6	12K/J6				
L3692	3R3U/LA	2R7U/LA	3R3U/LA	R3707	470K/J6	470K/J6	470K/J6				
L3693	220U/LA	150U/LA	220U/LA	R3708	4700/J6	4700/J6	4700/J6				
L3701	100U/LC	100U/LC	100U/LC	R3709	47K/J6	47K/J6	47K/J6				
L3702	100U/LC	100U/LC	100U/LC	R3710	1M/J6	1M/J6	1M/J6				





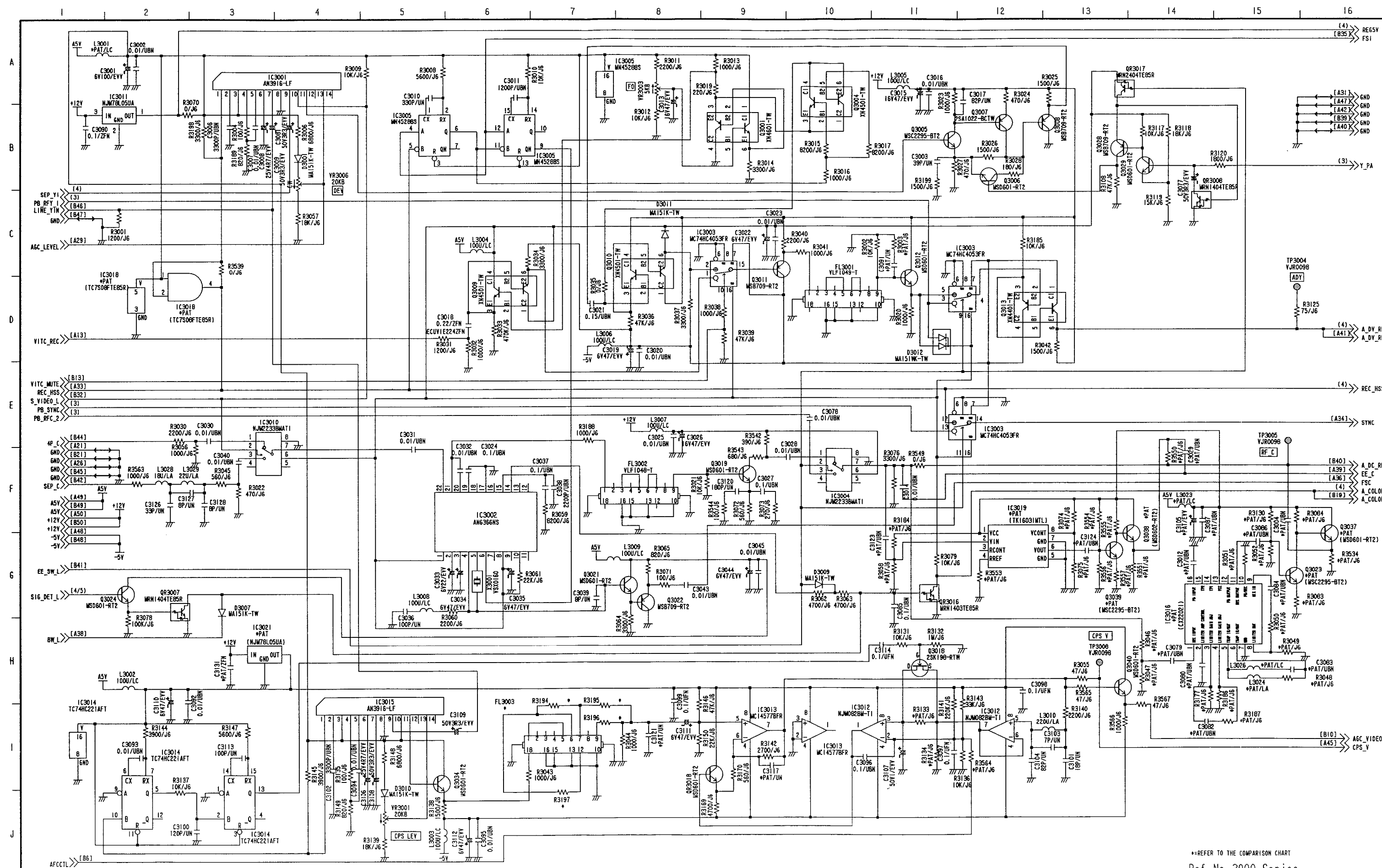




SCM-31



## VIDEO I/O-2 SCHEMATIC DIAGRAM (E5: Page CBA-8) 2/6



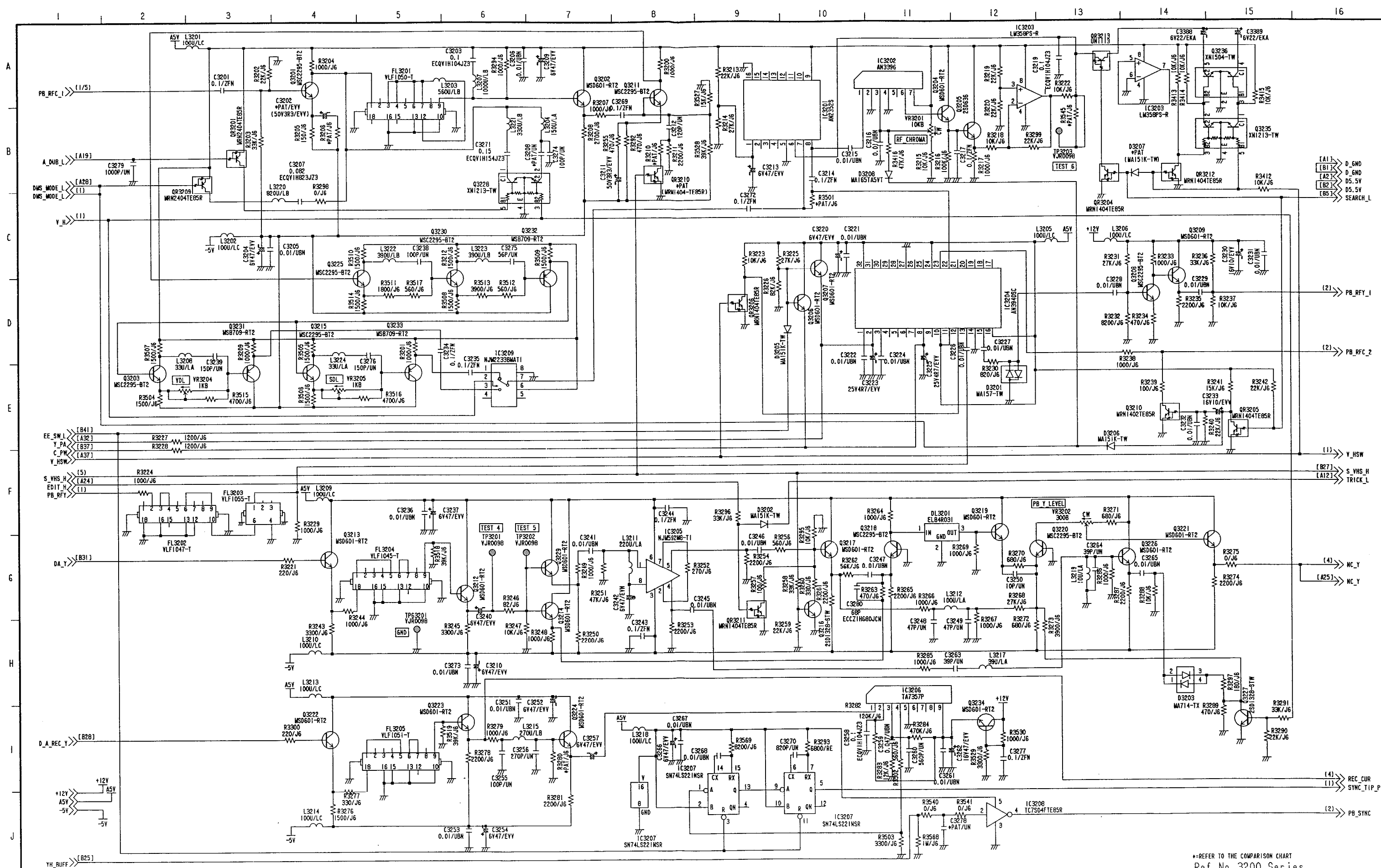
\*=REFER TO THE COMPARISON CHART  
Ref No. 3000 Series.







### VIDEO I/O-3 SCHEMATIC DIAGRAM (E5: Page CBA-8) 3/6



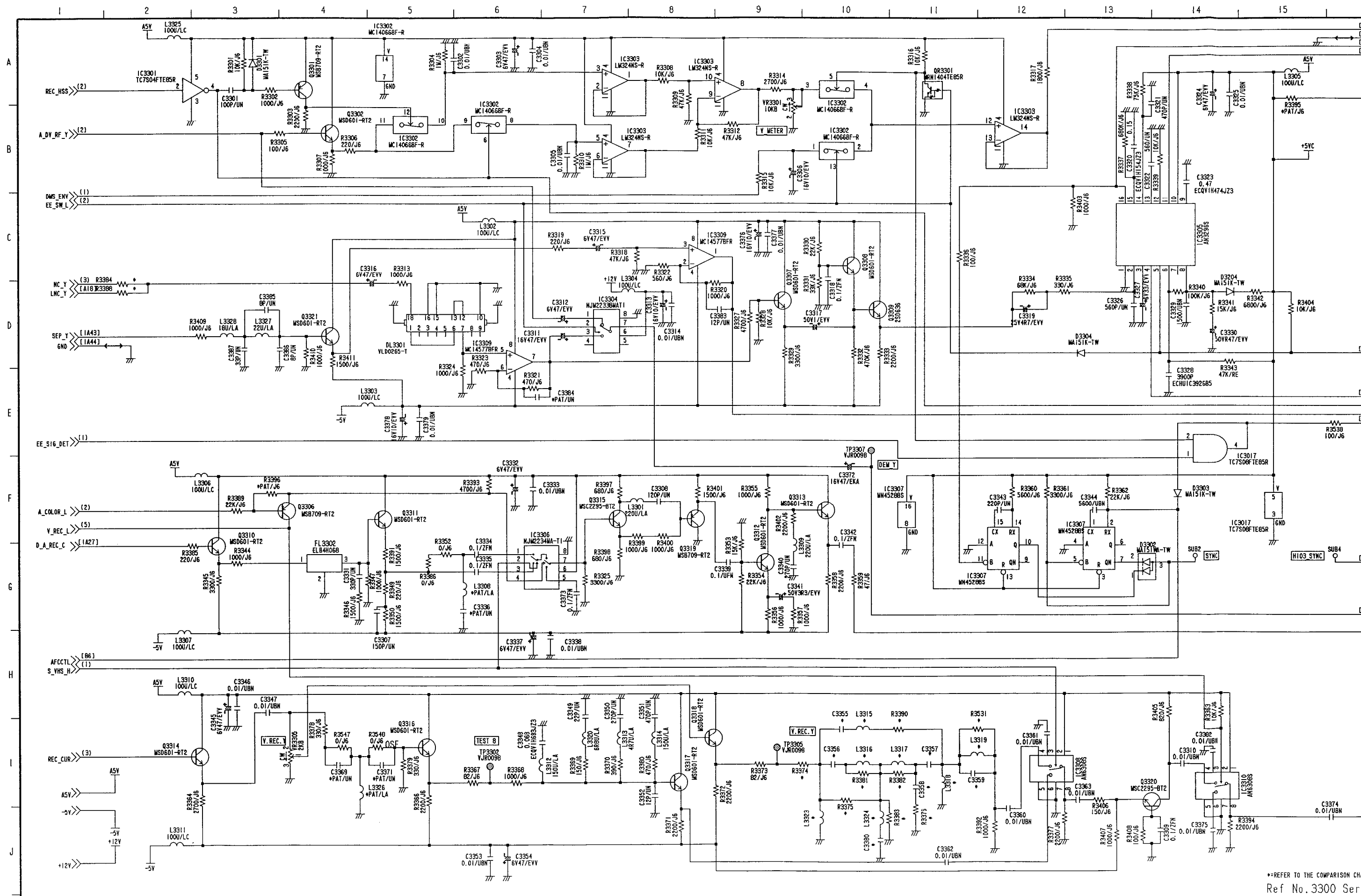
\*=REFER TO THE COMPARISON CHART  
Ref No. 3200 Series.





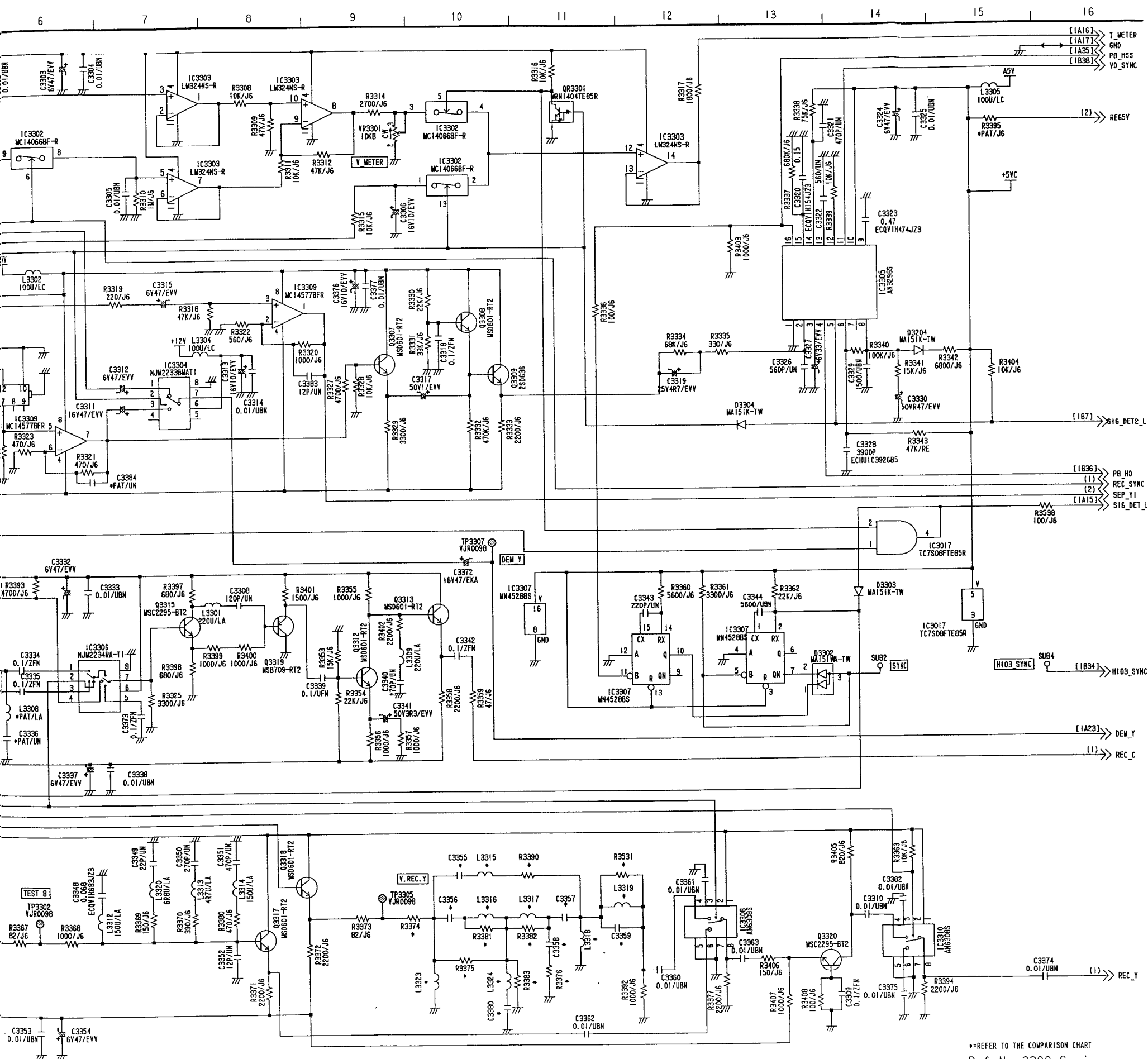


## VIDEO I/O-4 SCHEMATIC DIAGRAM (E5: Page CBA-8) 4/6

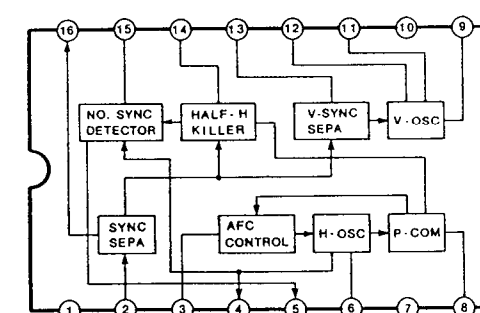


\*=REFER TO THE COMPARISON CH  
Ref No. 3300 Ser





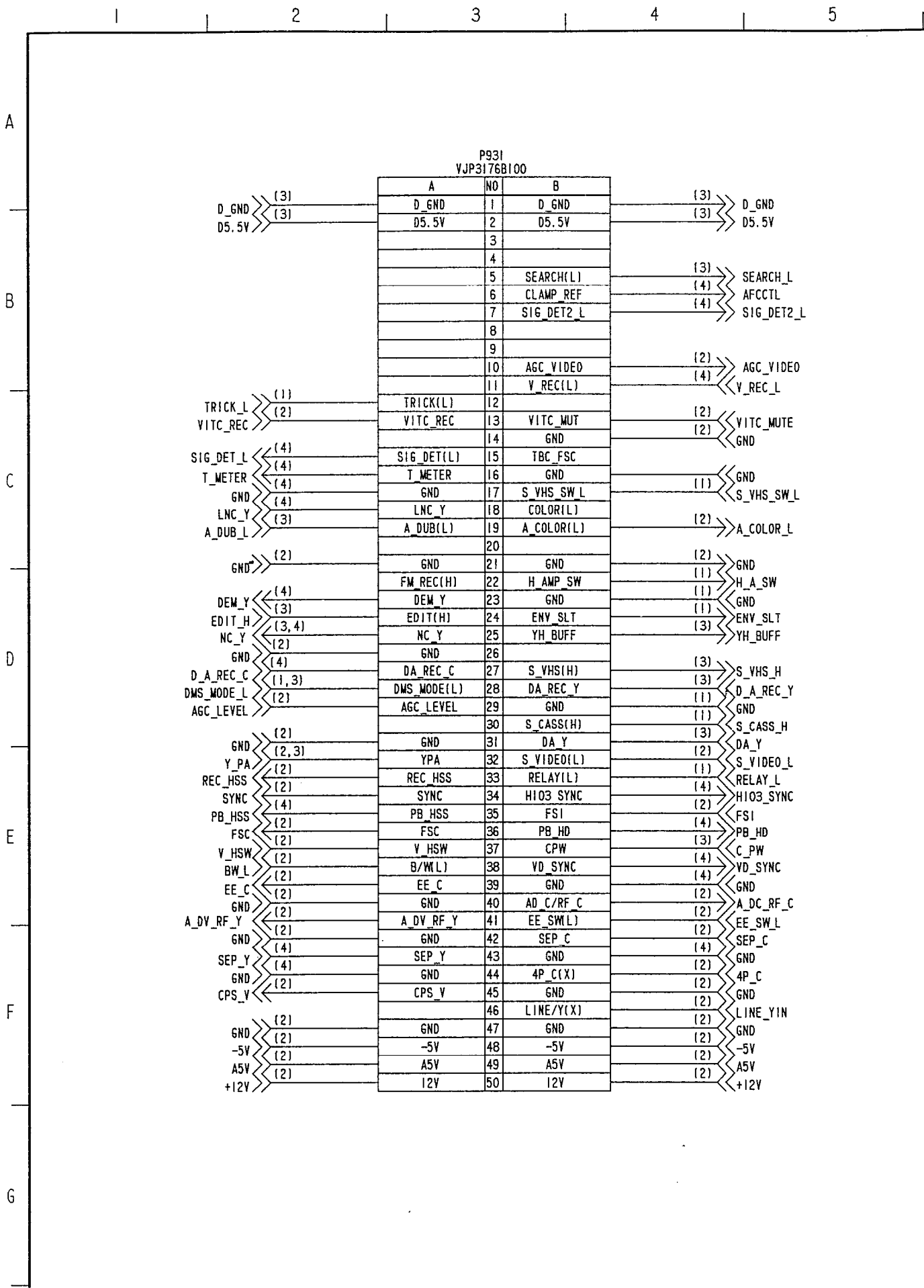
IC3305  
AN3296S



\*REFER TO THE COMPARISON CHART  
Ref No.3300 Series.



VIDEO I/O-5 SCHEMATIC DIAGRAM (E5: Page CBA-8) 5/6



VIDEO I/O COMPARISON CHART (E5: Page CBA-8)

\$REF\$	NTSC	PAL	ON	\$REF\$	NTSC	PAL	ON
C3004	*PAT/UBN	*PAT/UBN	AVSD38/UBN	L3308	*PAT/LA	*PAT/LA	AVSD1
C3012	*PAT/UBN	*PAT/UBN	AVSD3/UBN	L3315	220U/LA	*PAT/LA	AVSD1
C3029	*PAT/UBN	*PAT/UBN	0.01/UBN	L3316	39U/LA	*PAT/LA	39U
C3066	*PAT/UN	*PAT/UN	82P/UN	L3317	33U/LA	*PAT/LA	33U
C3067	*PAT/UN	*PAT/UN	10P/UN	L3318	82U/LA	*PAT/LA	82U
C3068	*PAT/UBN	*PAT/UBN	0.01/UBN	L3319	270U/LB	*PAT/LB	270U
C3079	*PAT/UBN	*PAT/UBN	AVSD1/UBN	L3323	*PAT/LA	*PAT/LA	82U
C3080	*PAT/UBN	*PAT/UBN	AVSD2/UBN	L3324	*PAT/LA	150U/LA	150U
C3082	*PAT/UBN	*PAT/UBN	AVSD4/UBN	L3326	*PAT/LA	*PAT/LA	33U
C3083	*PAT/UBN	*PAT/UBN	AVSD5/UBN	Q3023	*PAT	*PAT	MSC229
C3084	*PAT/UBN	*PAT/UBN	AVSD6/UBN	Q3037	*PAT	*PAT	MSD60
C3086	*PAT/UBN	*PAT/UBN	AVSD7/UBN	Q3038	*PAT	*PAT	MSD60
C3087	*PAT/UBN	*PAT/UBN	AVSD8/UBN	Q3039	*PAT	*PAT	MSC229
C3091	*PAT/UN	*PAT/UN	6P/UN	QR3210	*PAT	*PAT	MRN140
C3105	*PAT/EVV	*PAT/EVV	6V47/EVV	R3003	*PAT/J6	*PAT/J6	2700
C3117	*PAT/UN	*PAT/UN	4P/UN	R3046	*PAT/J6	*PAT/J6	AVSD1
C3121	*PAT/UN	*PAT/UN	22P/UN	R3047	*PAT/J6	*PAT/J6	AVSD2
C3123	*PAT/UBN	*PAT/UBN	0.01/UBN	R3048	*PAT/J6	*PAT/J6	AVSD2
C3124	*PAT/UBN	*PAT/UBN	0.01/UBN	R3049	*PAT/J6	*PAT/J6	AVSD2
C3129	*PAT/UN	*PAT/UN	15P/UN	R3050	*PAT/J6	*PAT/J6	AVSD2
C3131	*PAT/ZFN	*PAT/ZFN	0.1/ZFN	R3051	*PAT/J6	*PAT/J6	AVSD3
C3202	*PAT/EVV	*PAT/EVV	50V3R3/EVV	R3052	*PAT/J6	*PAT/J6	AVSD2
C3208	*PAT/UN	*PAT/UN	AVSD10/UN	R3058	*PAT/J6	*PAT/J6	22K
C3278	*PAT/UN	*PAT/UN	100P/UN	R3074	*PAT/J6	*PAT/J6	22K
C3336	*PAT/UN	*PAT/UN	AVSD11/UN	R3075	*PAT/J6	*PAT/J6	22K
C3355	0.01/UBN	*PAT/UBN	0.01/UBN	R3083	*PAT/J6	*PAT/J6	AVSD2
C3356	15P/UN	68P/UN	15P/UN	R3084	*PAT/J6	*PAT/J6	AVSD2
C3357	270P/UN	0.01/UBN	270P/UN	R3091	*PAT/J6	*PAT/J6	1000
C3358	82P/UN	10P/UN	82P/UN	R3101	*PAT/J6	*PAT/J6	AVSD2
C3359	180P/UN	0/J6	180P/UN	R3102	*PAT/J6	*PAT/J6	680
C3369	*PAT/UN	*PAT/UN	150P/UN	R3130	*PAT/J6	*PAT/J6	AVSD2
C3371	*PAT/UN	*PAT/UN	150P/UN	R3133	*PAT/J6	*PAT/J6	AVSD2
C3380	*PAT/UN	180P/UN	180P/UN	R3134	*PAT/J6	*PAT/J6	AVSD3
C3384	*PAT/UN	*PAT/UN	27P/UN	R3177	*PAT/J6	*PAT/J6	47K
FL3003	VLF1015-T	VLF0932-T	VLF1015-T	R3179	*PAT/J6	*PAT/J6	AVSD3
IC3016	*PAT	*PAT	CX22021	R3184	*PAT/J6	*PAT/J6	10K
IC3018	*PAT	*PAT	TC7S08FTE85R	R3186	*PAT/J6	*PAT/J6	47K
IC3019	*PAT	*PAT	TK16031MTL	R3187	*PAT/J6	*PAT/J6	47K
IC3021	*PAT	*PAT	NJM78L05UA	R3194	*PAT/J6	0/J6	0/
L3001	*PAT/LC	*PAT/LC	100U/LC	R3195	0/J6	*PAT/J6	0/
L3019	*PAT/LA	*PAT/LA	15U/LA	R3196	*PAT/J6	0/J6	0/
L3023	*PAT/LC	*PAT/LC	AVSD14/LC	R3197	0/J6	*PAT/J6	0/
L3024	*PAT/LA	*PAT/LA	AVSD15/LA	R3206	*PAT/J6	*PAT/J6	AVSD3
L3026	*PAT/LC	*PAT/LC	AVSD16/LC	R3210	*PAT/J6	*PAT/J6	AVSD3
L3030	*PAT/LA	*PAT/LA	10U/LA	R3280	*PAT/J6	*PAT/J6	AVSD3

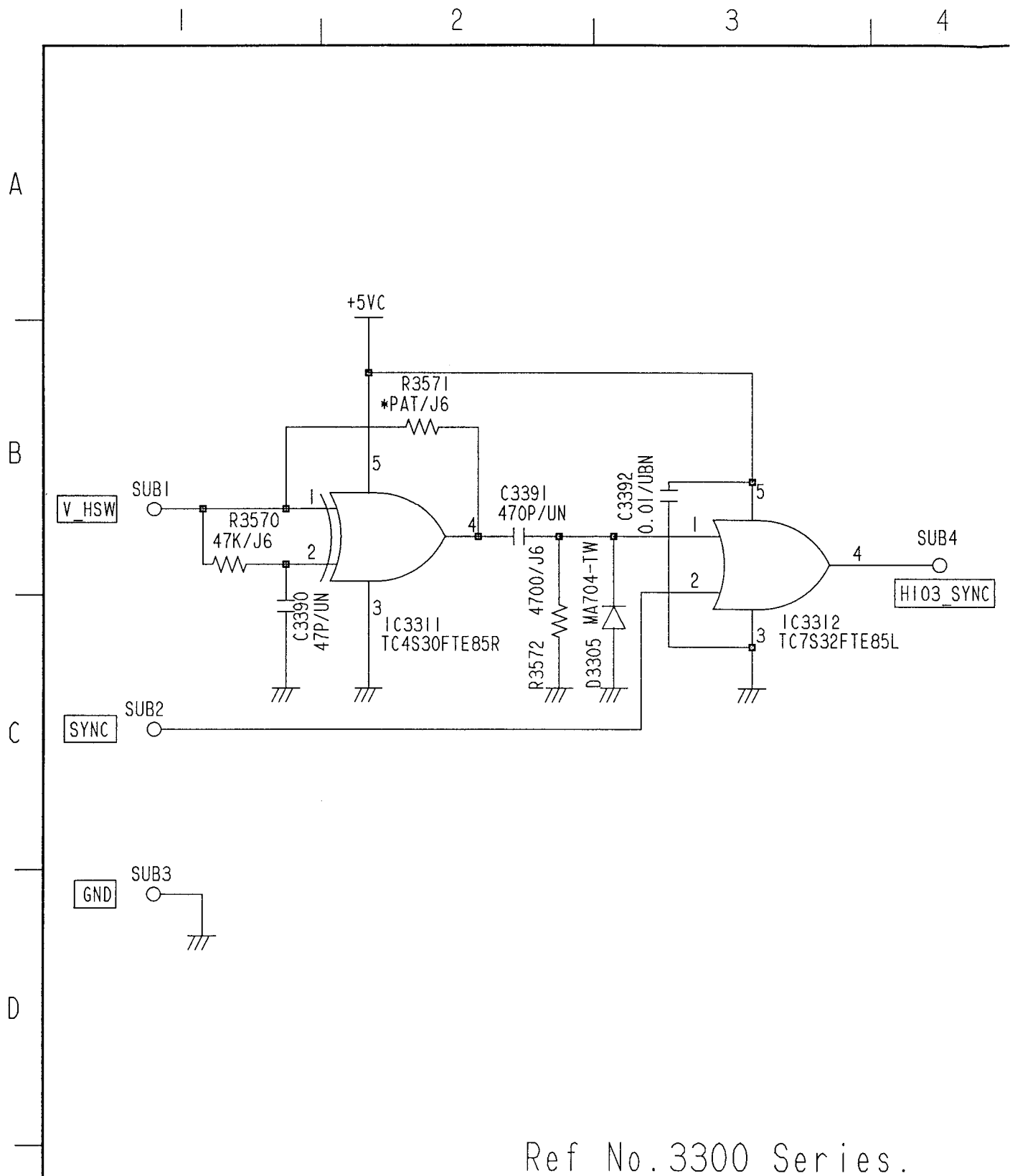


## VIDEO I/O COMPARISON CHART (E5: Page CBA-8)

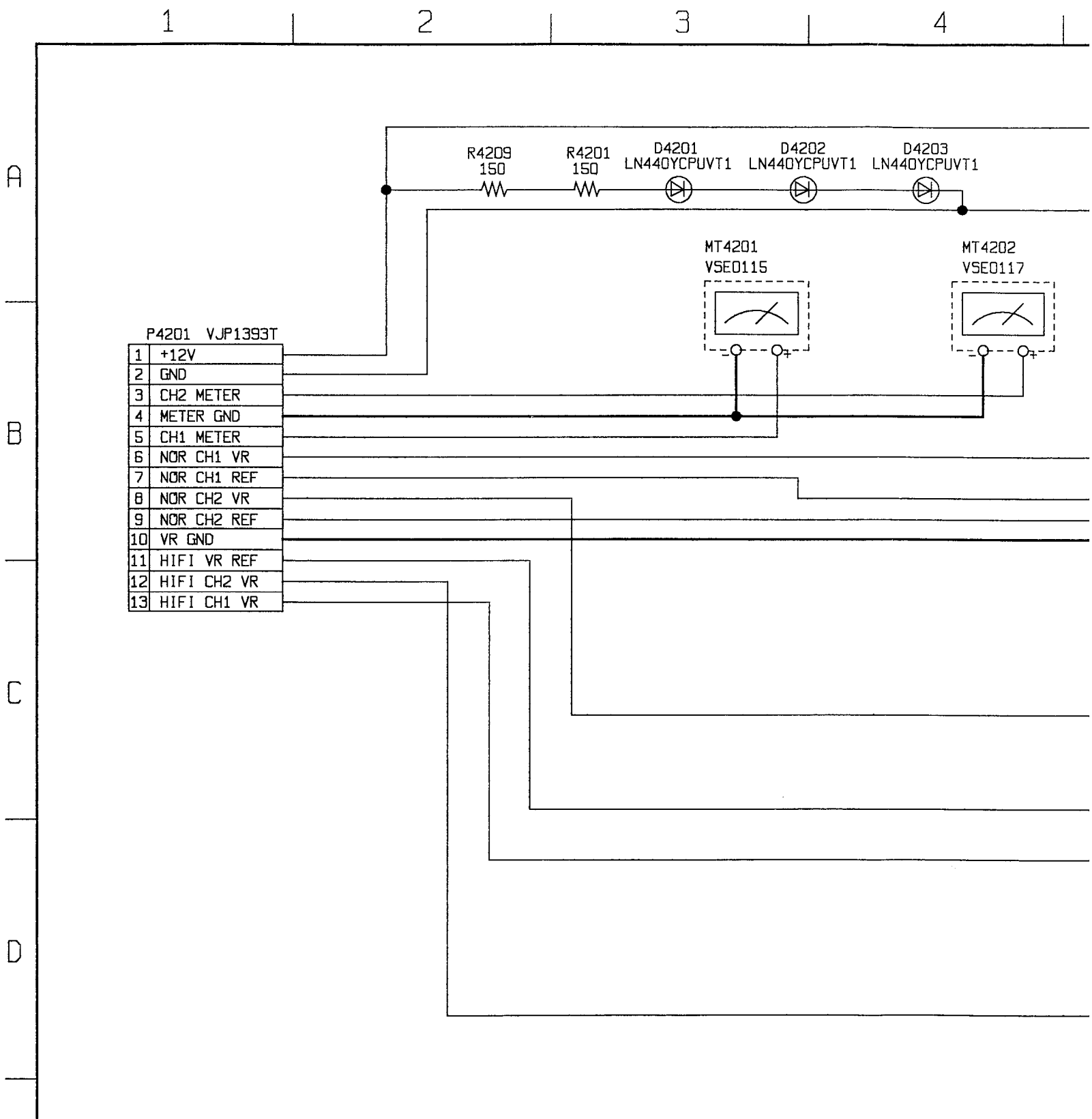
\$REF\$	NTSC	PAL	ON	\$REF\$	NTSC	PAL	ON	\$REF\$	NTSC	PAL	ON
C3004	*PAT/UBN	*PAT/UBN	AVSD38/UBN	L3308	*PAT/LA	*PAT/LA	AVSD17/LA	R3374	1000/J6	470/J6	1000/J6
C3012	*PAT/UBN	*PAT/UBN	AVSD3/UBN	L3315	220U/LA	*PAT/LA	AVSD18/LA	R3375	680/J6	*PAT/J6	680/J6
C3029	*PAT/UBN	*PAT/UBN	0.01/UBN	L3316	39U/LA	*PAT/LA	39U/LA	R3376	0/J6	680/J6	0/J6
C3066	*PAT/UN	*PAT/UN	82P/UN	L3317	33U/LA	*PAT/LA	33U/LA	R3381	*PAT/J6	0/J6	0/J6
C3067	*PAT/UN	*PAT/UN	10P/UN	L3318	82U/LA	*PAT/LA	82U/LA	R3382	*PAT/J6	2200/J6	2200/J6
C3068	*PAT/UBN	*PAT/UBN	0.01/UBN	L3319	270U/LB	*PAT/LB	270U/LB	R3383	*PAT/J6	1000/J6	1000/J6
C3079	*PAT/UBN	*PAT/UBN	AVSD1/UBN	L3323	*PAT/LA	82U/LA	82U/LA	R3384	0/J6	*PAT/J6	0/J6
C3080	*PAT/UBN	*PAT/UBN	AVSD2/UBN	L3324	*PAT/LA	150U/LA	150U/LA	R3388	*PAT/J6	0/J6	0/J6
C3082	*PAT/UBN	*PAT/UBN	AVSD4/UBN	L3326	*PAT/LA	*PAT/LA	33U/LA	R3390	470/J6	*PAT/J6	470/J6
C3083	*PAT/UBN	*PAT/UBN	AVSD5/UBN	Q3023	*PAT	*PAT	MSC2295-BT2	R3395	*PAT/J6	*PAT/J6	AVSD35/J6
C3084	*PAT/UBN	*PAT/UBN	AVSD6/UBN	Q3037	*PAT	*PAT	MSD601-RT2	R3396	*PAT/J6	*PAT/J6	AVSD36/J6
C3086	*PAT/UBN	*PAT/UBN	AVSD7/UBN	Q3038	*PAT	*PAT	MSD601-RT2	R3501	*PAT/J6	0/J6	0/J6
C3087	*PAT/UBN	*PAT/UBN	AVSD8/UBN	Q3039	*PAT	*PAT	MSC2295-BT2	R3531	2700/J6	*PAT/J6	2700/J6
C3091	*PAT/UN	*PAT/UN	6P/UN	QR3210	*PAT	*PAT	MRN1404TE85R	R3534	*PAT/J6	*PAT/J6	1000/J6
C3105	*PAT/EVV	*PAT/EVV	6V47/EVV	R3003	*PAT/J6	*PAT/J6	2700/J6	R3550	*PAT/J6	*PAT/J6	0/J6
C3117	*PAT/UN	*PAT/UN	4P/UN	R3046	*PAT/J6	*PAT/J6	AVSD19/J6	R3551	*PAT/J6	*PAT/J6	1000/J6
C3121	*PAT/UN	*PAT/UN	22P/UN	R3047	*PAT/J6	*PAT/J6	AVSD20/J6	R3553	*PAT/J6	*PAT/J6	18K/J6
C3123	*PAT/UBN	*PAT/UBN	0.01/UBN	R3048	*PAT/J6	*PAT/J6	AVSD21/J6	R3554	*PAT/J6	*PAT/J6	22K/J6
C3124	*PAT/UBN	*PAT/UBN	0.01/UBN	R3049	*PAT/J6	*PAT/J6	AVSD22/J6	R3555	*PAT/J6	*PAT/J6	1000/J6
C3129	*PAT/UN	*PAT/UN	15P/UN	R3050	*PAT/J6	*PAT/J6	AVSD23/J6	R3556	*PAT/J6	*PAT/J6	10K/J6
C3131	*PAT/ZFN	*PAT/ZFN	0.1/ZFN	R3051	*PAT/J6	*PAT/J6	AVSD37/J6	R3557	*PAT/J6	*PAT/J6	470/J6
C3202	*PAT/EVV	*PAT/EVV	50V3R3/EVV	R3052	*PAT/J6	*PAT/J6	AVSD24/J6	R3564	*PAT/J6	*PAT/J6	0/J6
C3208	*PAT/UN	*PAT/UN	AVSD10/UN	R3058	*PAT/J6	*PAT/J6	22K/J6				
C3278	*PAT/UN	*PAT/UN	100P/UN	R3074	*PAT/J6	*PAT/J6	22K/J6				
C3336	*PAT/UN	*PAT/UN	AVSD11/UN	R3075	*PAT/J6	*PAT/J6	22K/J6				
C3355	0.01/UBN	*PAT/UBN	0.01/UBN	R3083	*PAT/J6	*PAT/J6	AVSD25/J6				
C3356	15P/UN	68P/UN	15P/UN	R3084	*PAT/J6	*PAT/J6	AVSD26/J6				
C3357	270P/UN	0.01/UBN	270P/UN	R3091	*PAT/J6	*PAT/J6	1000/J6				
C3358	82P/UN	10P/UN	82P/UN	R3101	*PAT/J6	*PAT/J6	AVSD27/J6				
C3359	180P/UN	0/J6	180P/UN	R3102	*PAT/J6	*PAT/J6	680/J6				
C3369	*PAT/UN	*PAT/UN	150P/UN	R3130	*PAT/J6	*PAT/J6	AVSD28/J6				
C3371	*PAT/UN	*PAT/UN	150P/UN	R3133	*PAT/J6	*PAT/J6	AVSD29/J6				
C3380	*PAT/UN	180P/UN	180P/UN	R3134	*PAT/J6	*PAT/J6	AVSD30/J6				
C3384	*PAT/UN	*PAT/UN	27P/UN	R3177	*PAT/J6	*PAT/J6	47K/J6				
FL3003	VLF1015-T	VLF0932-T	VLF1015-T	R3179	*PAT/J6	*PAT/J6	AVSD31/J6				
IC3016	*PAT	*PAT	CX22021	R3184	*PAT/J6	*PAT/J6	10K/J6				
IC3018	*PAT	*PAT	TC7S08FTE85R	R3186	*PAT/J6	*PAT/J6	47K/J6				
IC3019	*PAT	*PAT	TK16031MTL	R3187	*PAT/J6	*PAT/J6	47K/J6				
IC3021	*PAT	*PAT	NJM78L05UA	R3194	*PAT/J6	0/J6	0/J6				
L3001	*PAT/LC	*PAT/LC	100U/LC	R3195	0/J6	*PAT/J6	0/J6				
L3019	*PAT/LA	*PAT/LA	15U/LA	R3196	*PAT/J6	0/J6	0/J6				
L3023	*PAT/LC	*PAT/LC	AVSD14/LC	R3197	0/J6	*PAT/J6	0/J6				
L3024	*PAT/LA	*PAT/LA	AVSD15/LA	R3206	*PAT/J6	*PAT/J6	AVSD32/J6				
L3026	*PAT/LC	*PAT/LC	AVSD16/LC	R3210	*PAT/J6	*PAT/J6	AVSD33/J6				
L3030	*PAT/LA	*PAT/LA	10U/LA	R3280	*PAT/J6	*PAT/J6	AVSD34/J6				



VIDEO I/O SUB (1) SCHEMATIC DIAGRAM (E104: Page CBA-8)

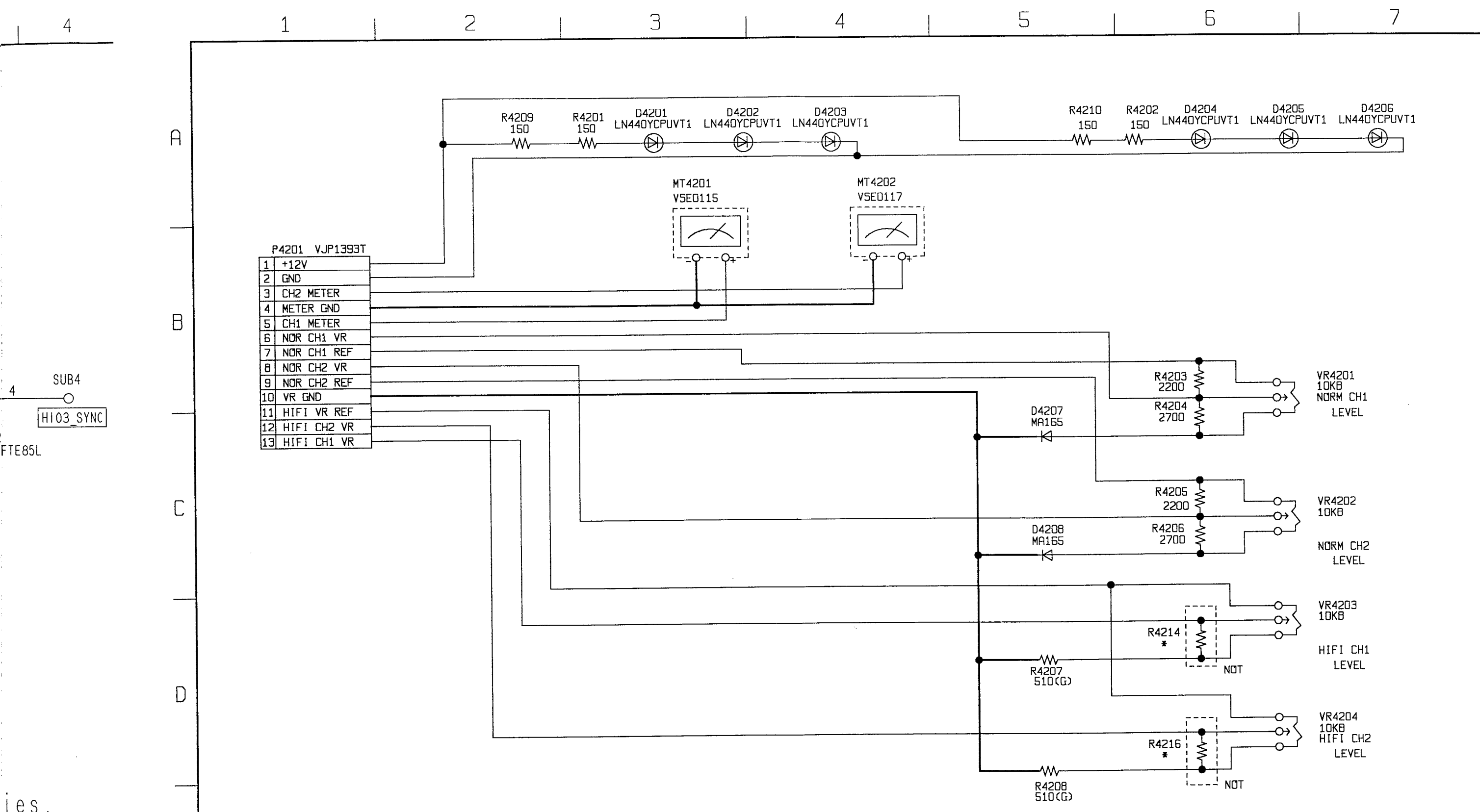


AUDIO METER SCHEMATIC DIAGRAM (E21)



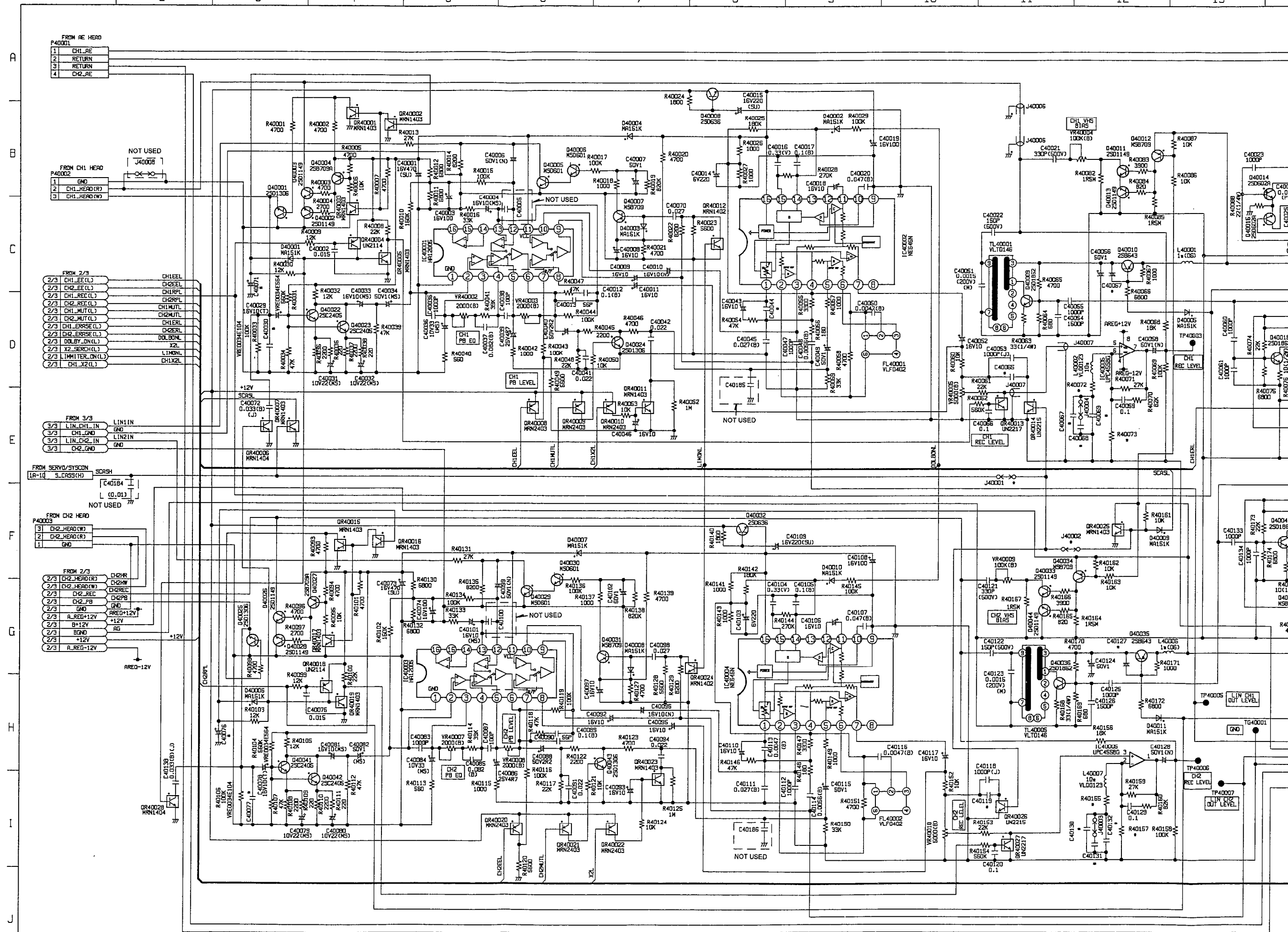


## AUDIO METER SCHEMATIC DIAGRAM (E21)

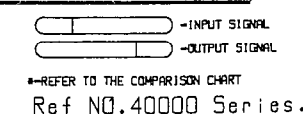




	2	3	4	5	6	7	8	9	10	11	12	13
--	---	---	---	---	---	---	---	---	----	----	----	----

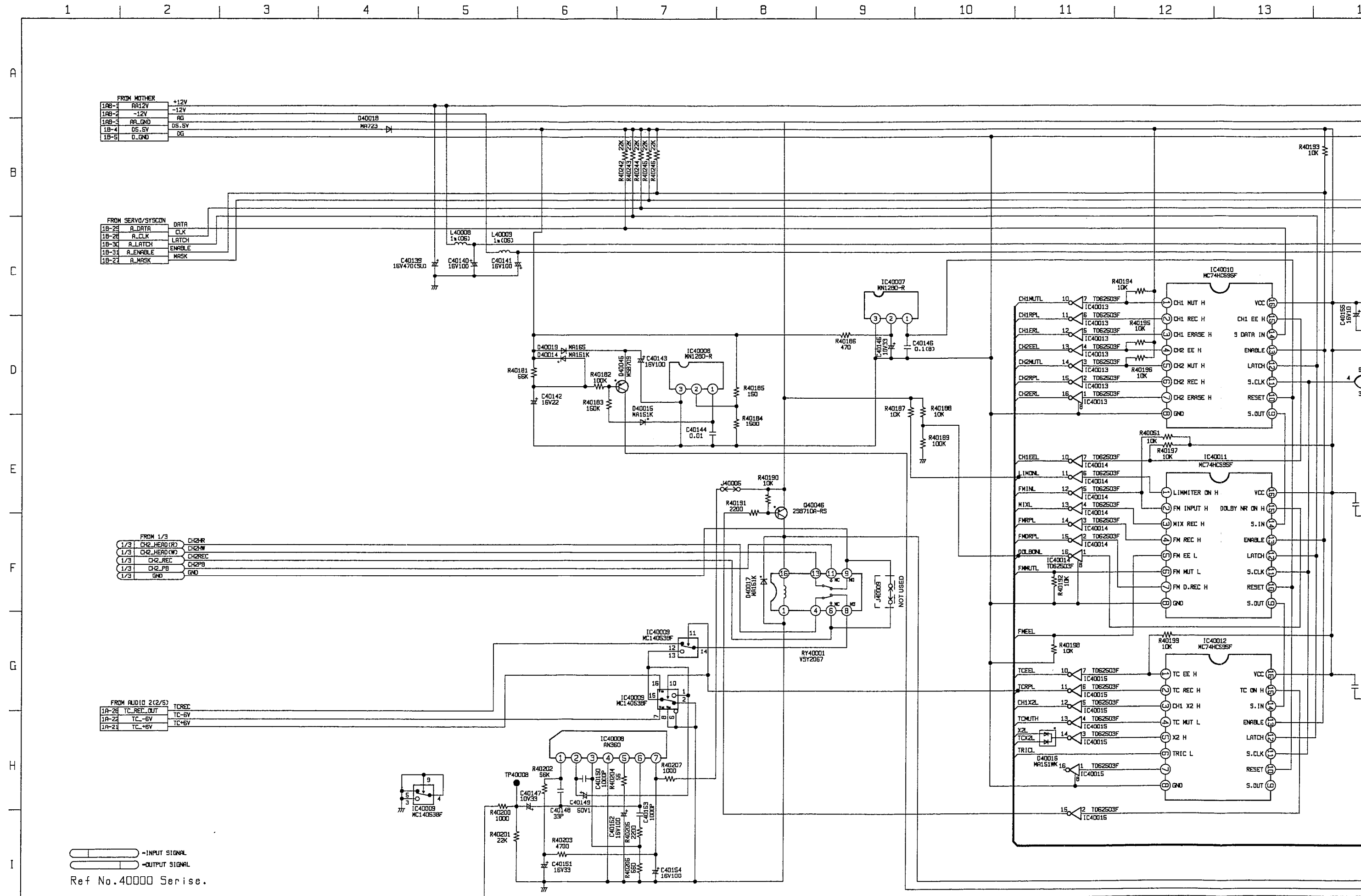




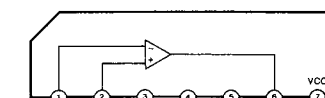
[illegible]



**AUDIO (1) CONTROL SCHEMATIC DIAGRAM (E7: Page CBA-11) 2/3**



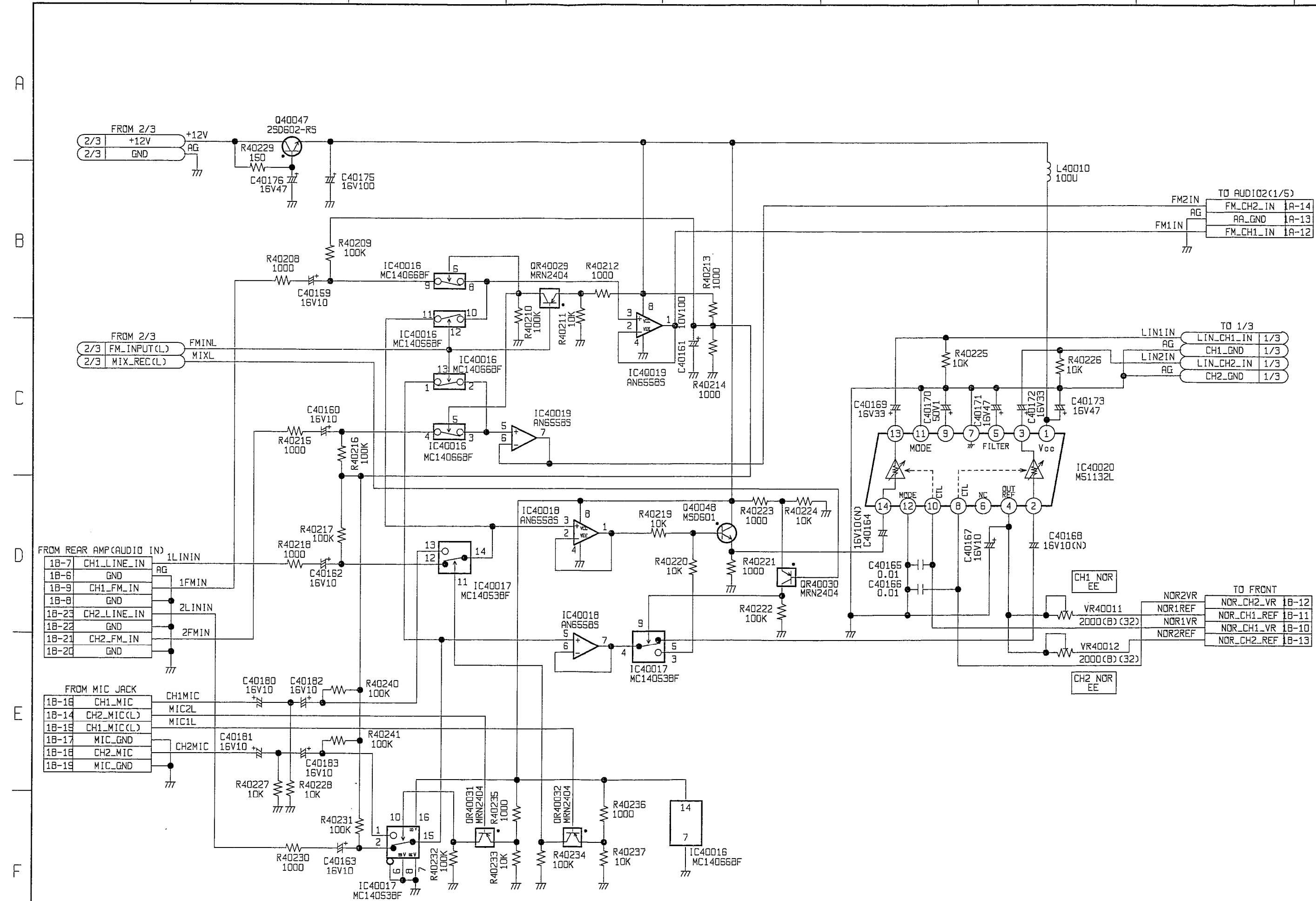




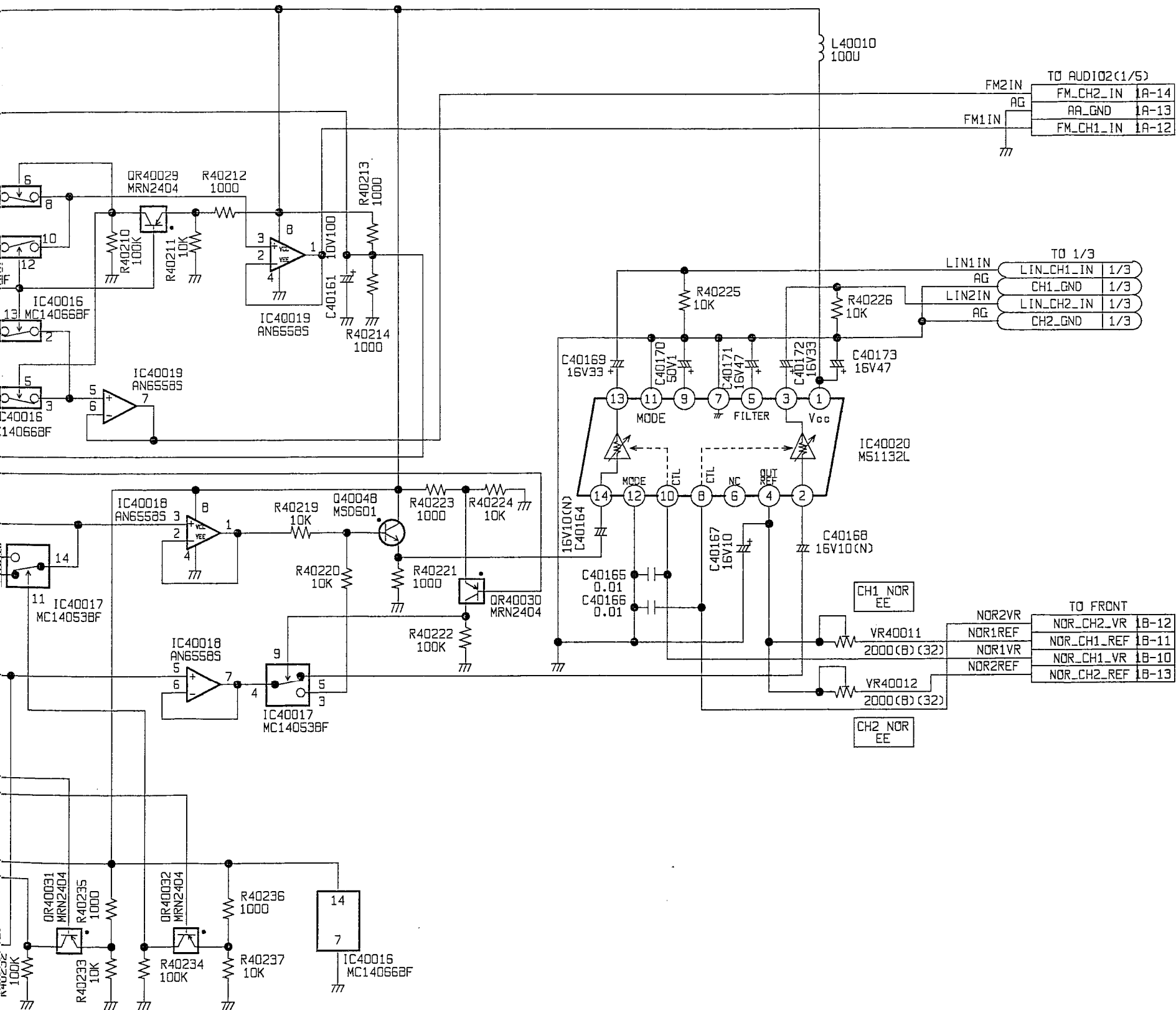
		TO AUD102(2/5)	
TCMUTH		TC_MUT(H)	IA-24
TCEEL		TC_EE(L)	IA-23
TCRPL		TC_REC(L)	IA-27
TCX2L		TC_X2(L)	IA-28
LTCMUTH		LTC_MUT(H)	IA-19
PMUT		POWER_MUT	IA-20
TCPB		TC_PB	IA-26



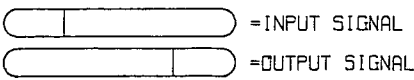
1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---







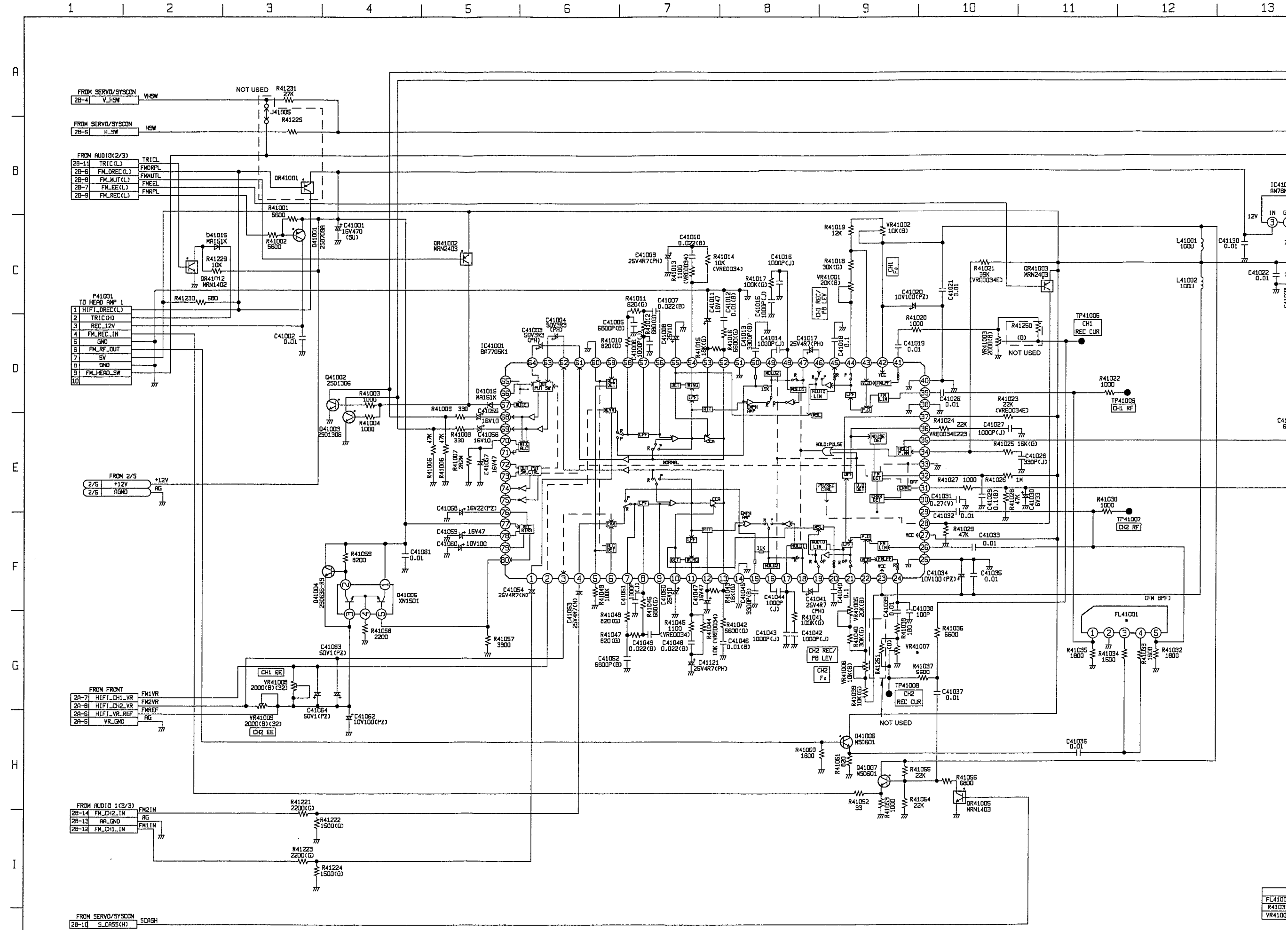
P40004									
	1 A	No	1 B						
2/3	+12V	1	A12V	+12V	2/3				
2/3	-12V	2	-12V	-12V	2/3				
2/3	AG	3	AA_GND	AG	2/3				
		4	D5.5V	D5.5V	2/3				
		5	D_GND	DG	2/3				
2/3	FMDRPL	6	FM_DREC(L)	AG	2/3				
2/3	FMEEL	7	FM_EE(L)	1LININ	3/3				
2/3	FMMUTL	8	FM_MUT(L)	AG	3/3				
2/3	FMRPL	9	FM_REC(L)	1FMIN	3/3				
1/3	SCASH	10	S_CASS(H)	NOR1VR	3/3				
2/3	TRICL	11	TRIC(L)	NOR1REF	3/3				
3/3	FM1IN	12	FM_CH1_IN	NOR2VR	3/3				
3/3	AG	13	AA_GND	NOR2REF	3/3				
3/3	FM2IN	14	FM_CH2_IN	MIC2L	3/3				
1/3	AG	15	LIN_CH1_GND	MIC1L	3/3				
1/3	LIN1OUT	16	LIN_CH1_OUT	CH1MIC	3/3				
1/3	AG	17	LIN_CH2_GND	AG	3/3				
1/3	LIN2OUT	18	LIN_CH2_OUT	CH2MIC	3/3				
2/3	LTCMUTH	19	LTC_MUT(H)	AG	3/3				
2/3	PMUT	20	POWER_MUT	AG	3/3				
2/3	TC+6V	21	TC_+6V	2FMIN	3/3				
2/3	TC-6V	22	TC_-6V	AG	3/3				
2/3	TCEEL	23	TC_EE(L)	2LININ	3/3				
2/3	TCMUTH	24	TC_MUT(H)						
2/3	TCPB	25	TC_PB						
2/3	TCREC	26	TC_REC_OUT						
2/3	TCRPL	27	TC_REC(L)						
2/3	TCX2L	28	TC_X2(L)						
		29	A_MASK						
		30	A_LATCH						
		31	A_ENABLE						
		32							



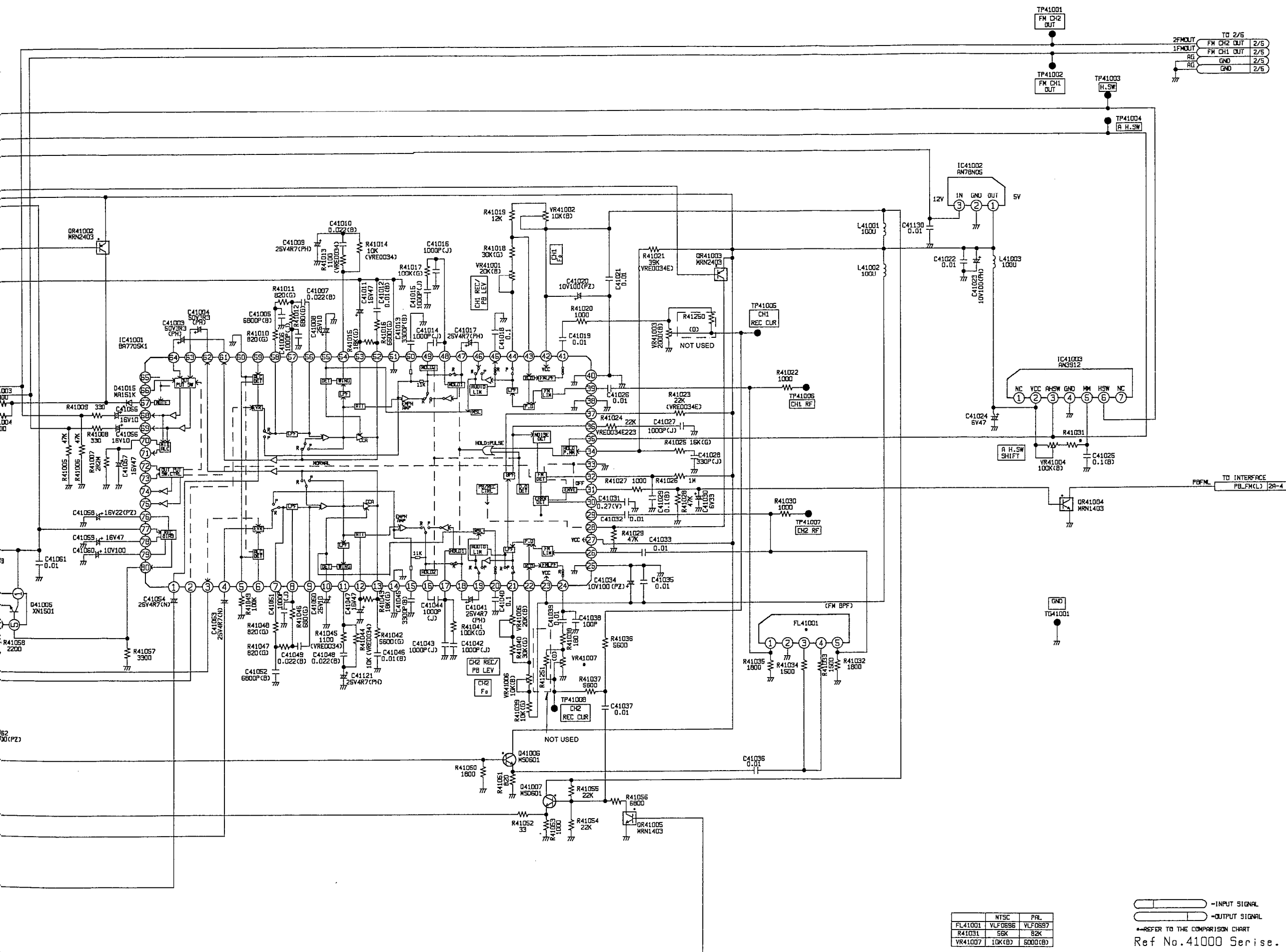
Ref No.40000 Serise.



# AUDIO (2) FM AUDIO SCHEMATIC DIAGRAM (E8: Page CBA-12) 1/5

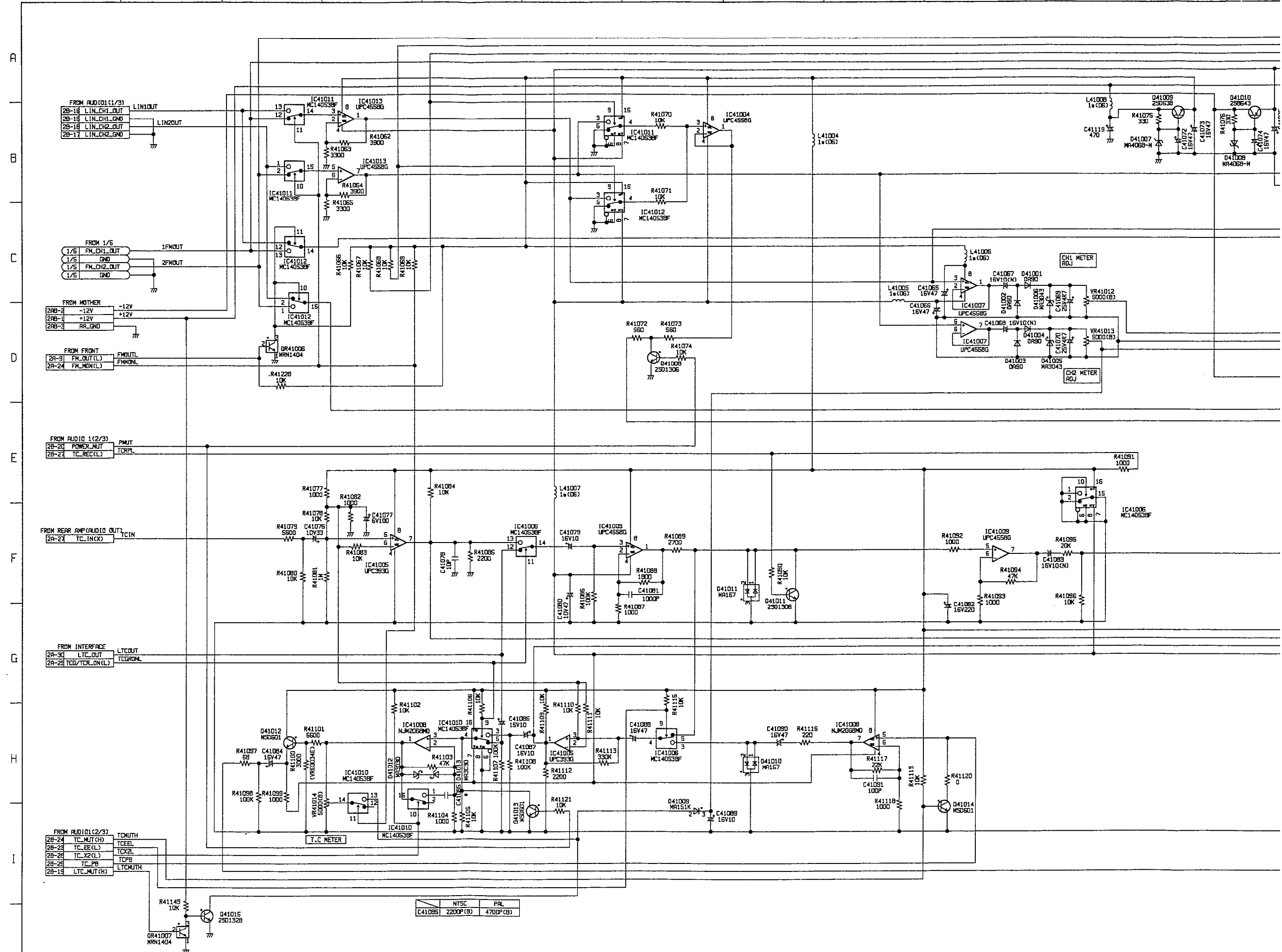








1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----

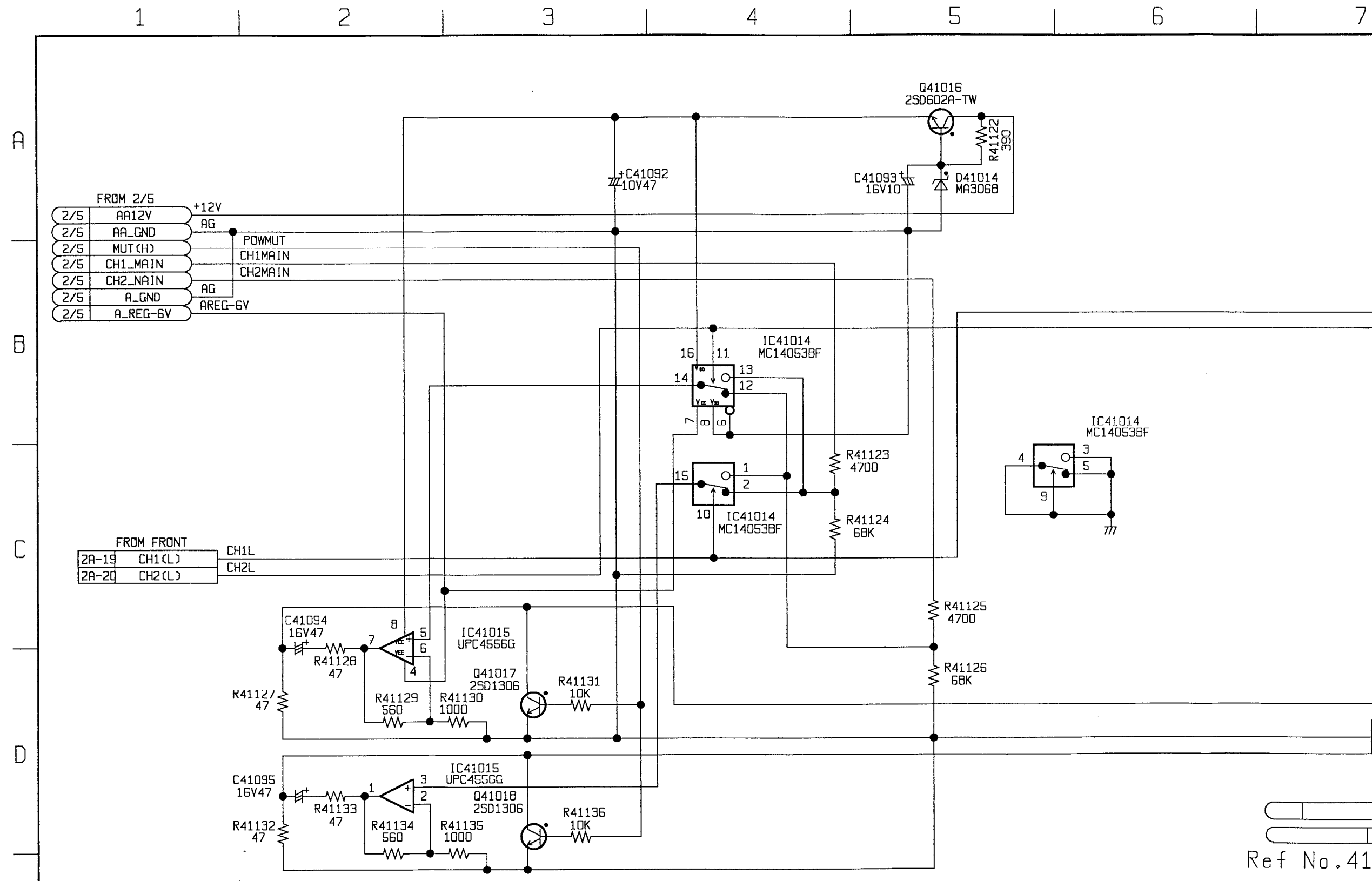






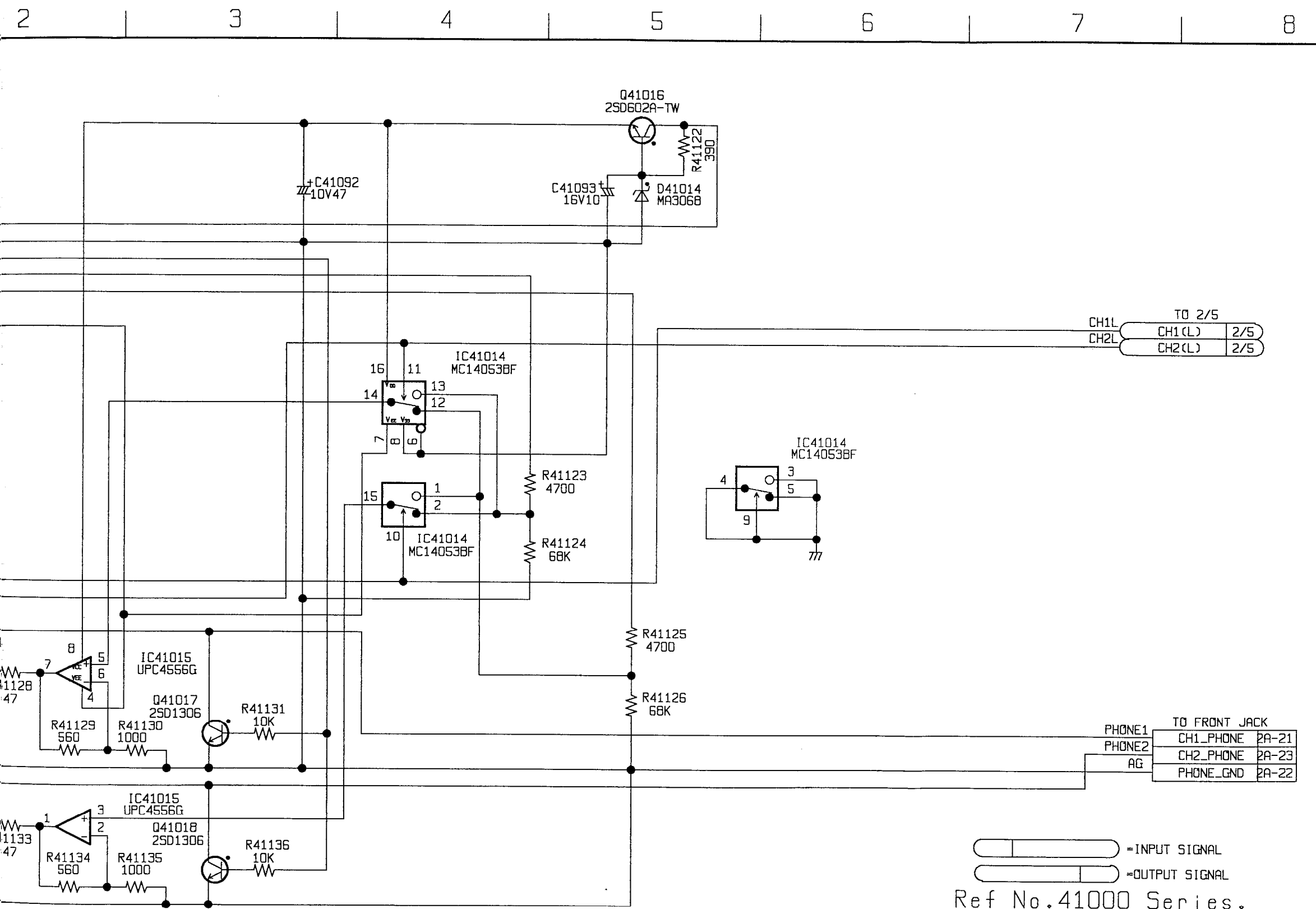


# AUDIO (2) PHONE OUT SCHEMATIC DIAGRAM (E8: Page CBA-12) 3/5



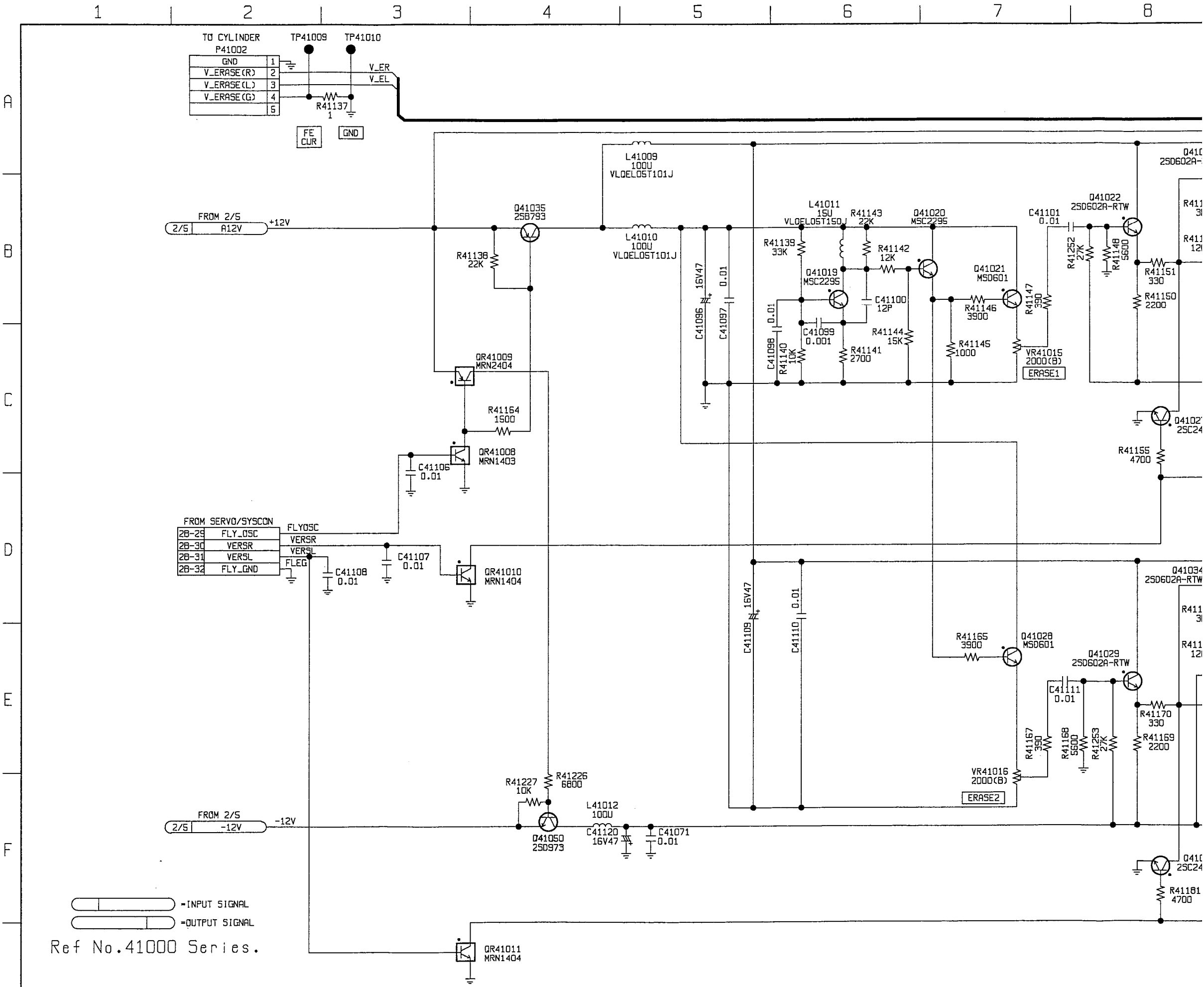
Ref No.41





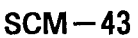


AUDIO (2) FLYING ERASE SCHEMATIC DIAGRAM (E8: Page CBA-12) 4/5





2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10





1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---



2/5	+12V	AA12V	1	AA12V
2/5	-12V	-12V	2	-12V
2/5	AG	AA_GND	3	AA_GND
1/5	PBFML	PB_FM(L)	4	V_HSW
1/5	AG	VR_GND	5	H_SW
1/5	FMREF	HIFI_VR_REF	6	FM_DREC
1/5	FM1VR	HIFI_CH1_VR	7	FM_EE(L)
1/5	FM2VR	HIFI_CH2_VR	8	FM_MUT
2/5	FMOUTL	FM_OUT(L)	9	FM_REC(L)
2/5	CH2MET	CH2_METER	10	S_CASS(C)
2/5	AG	METER_GND	11	TRIC(L)
2/5	CH1MET	CH1_METER	12	FM_CH1
2/5	MONITOR	MONITOR	13	AA_GND
5/5	2FMAOUT	CH2_FM_AMP_OUT	14	FM_CH2
5/5	1FMAOUT	CH1_FM_AMP_OUT	15	LIN_CH1
5/5	AG	AA_GND	16	LIN_CH1
5/5	2LINAOUT	CH2_LIN_AMP_OUT	17	LIN_CH2
5/5	1LINAOUT	CH1_LIN_AMP_OUT	18	LIN_CH2
3/5	CH1L	CH1(L)	19	LTC_MUT
3/5	CH2L	CH2(L)	20	POWER_M
3/5	PHONE1	CH1_PHONE	21	TC_+5V
3/5	AG	PHONE_GND	22	TC_-6V
3/5	PHONE2	CH2_PHONE	23	TC_EE(L)
2/5	FMONL	FM_MON(L)	24	TC_MUT
2/5	TCOUT	TC_OUT(X)	25	TC_PB
2/5	TCIN	AA_GND	26	TC_REC(L)
2/5	AG	TC_IN(X)	27	TC_REC(L)
2/5	LTCXIN	LTC_EXT_IN	28	TC_X2(L)
2/5	TCGRNL	TCG/TCR_ON(L)	29	FLY_OS
2/5	LTCOUT	LTC_OUT	30	VERSR
2/5	LTCPBX	LTC_PB(X)	31	VERSL
2/5	AG	LTC_PB(G)	32	FLY_G



3

4

5

6

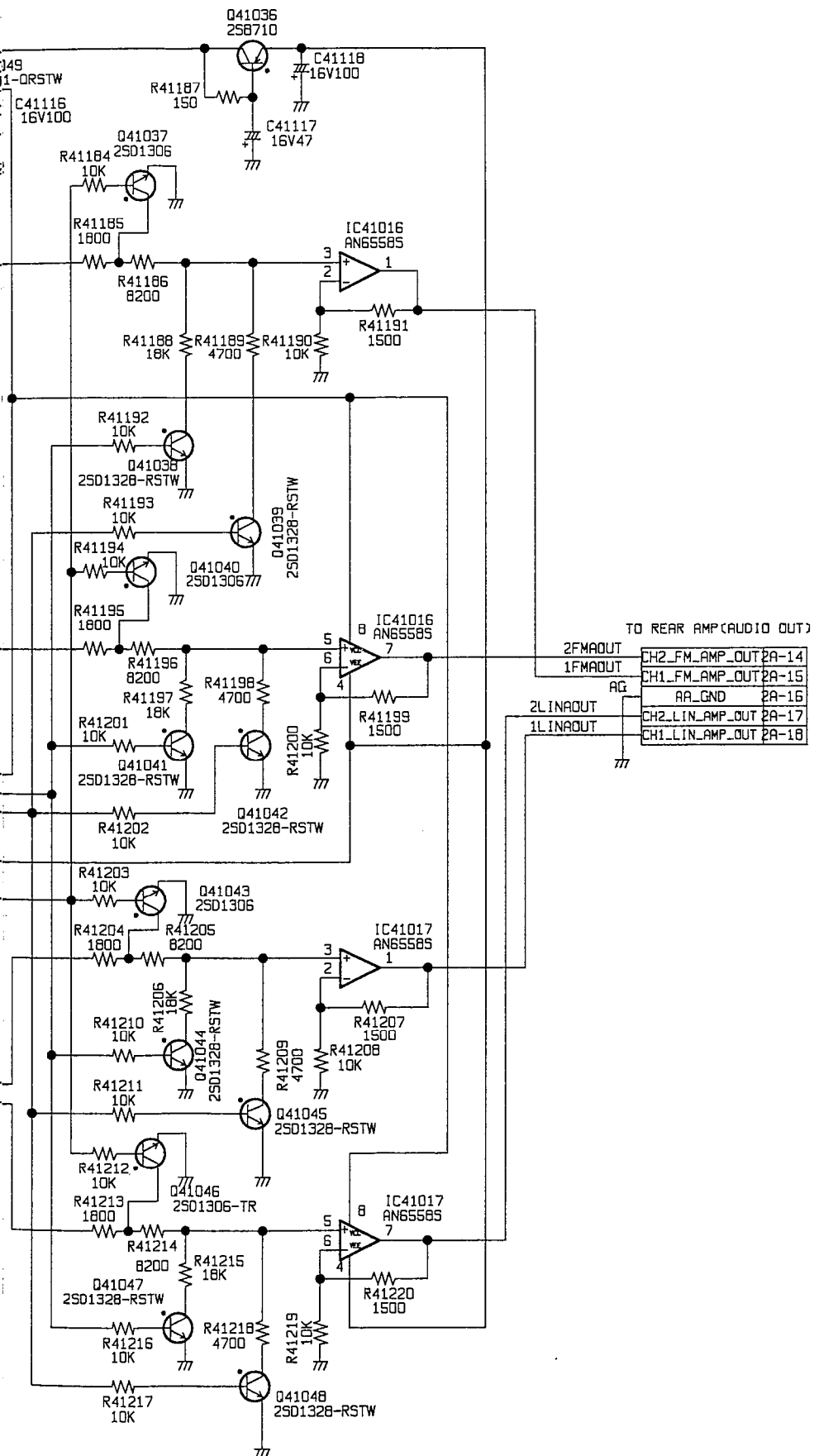
7

8

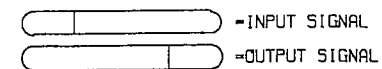
9

10

11



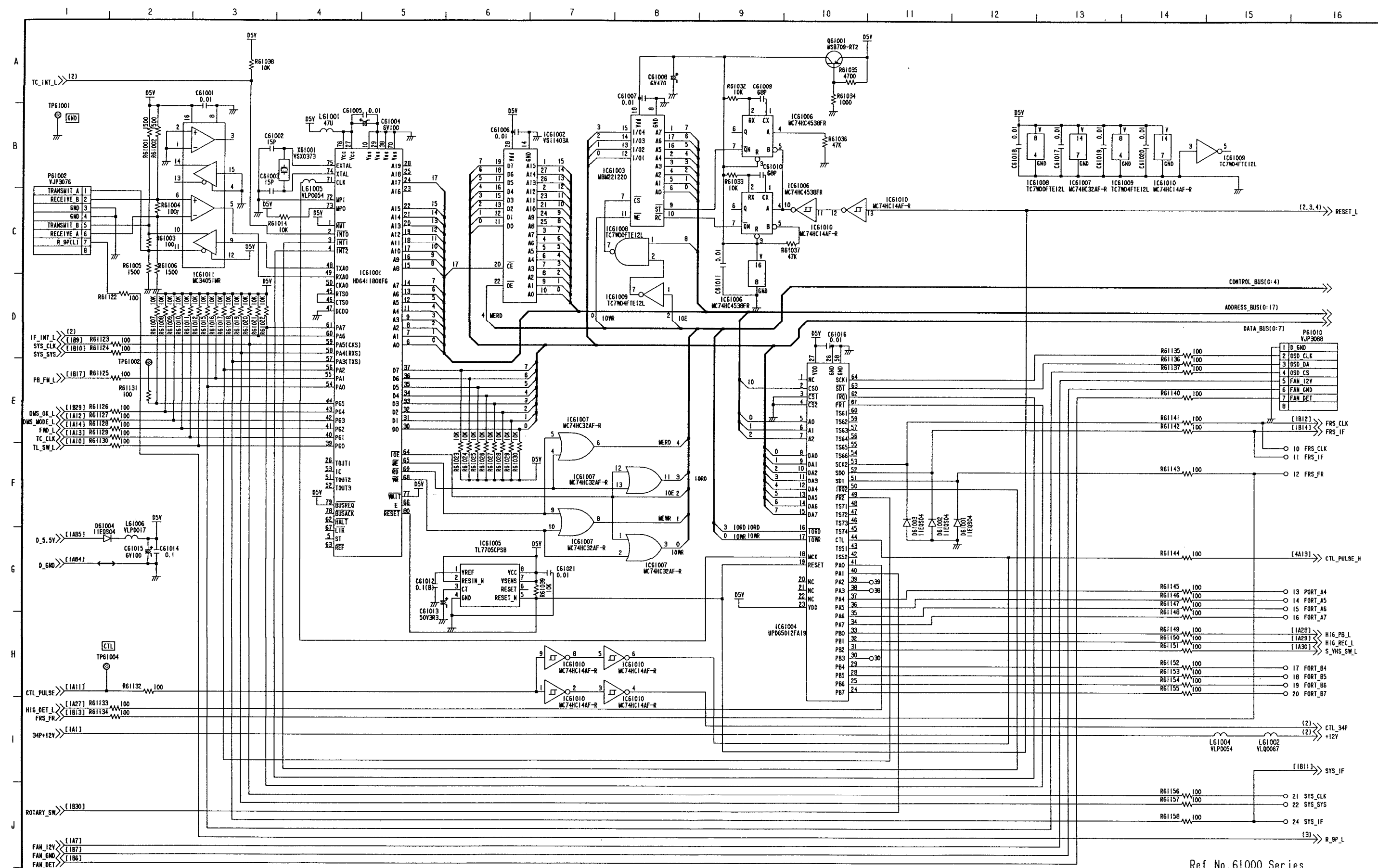
P41003					
		2 A	No	2 B	
2/5	+12V	AA12V	1	AA12V	2/5
2/5	-12V	-12V	2	-12V	2/5
2/5	AG	AA_GND	3	AA_GND	2/5
2/5	PBFML	PB_FM(L)	4	V_HSW	1/5
1/5	AG	VR_GND	5	H_SW	1/5
1/5	FMREF	HIFI_VR_REF	6	FM_DREC(L)	1/5
1/5	FM1VR	HIFI_CH1_VR	7	FM_EE(L)	1/5
1/5	FM2VR	HIFI_CH2_VR	8	FM_MUT(L)	1/5
2/5	FMOUTL	FM_OUT(L)	9	FM_REC(L)	1/5
2/5	CH2MET	CH2_METER	10	S_CASS(H)	1/5
2/5	AG	METER_GND	11	TRIC(L)	1/5
2/5	CH1MET	CH1_METER	12	FM_CH1_IN	1/5
2/5	MONITOR	MONITOR	13	AA_GND	1/5
5/5	2FMAOUT	CH2_FM_AMP_OUT	14	FM_CH2_IN	1/5
5/5	1FMAOUT	CH1_FM_AMP_OUT	15	LIN_CH1_GND	2/5
5/5	AG	AA_GND	16	LIN_CH1_OUT	2/5
5/5	2LINAOUT	CH2_LIN_AMP_OUT	17	LIN_CH2_GND	2/5
5/5	1LINAOUT	CH1_LIN_AMP_OUT	18	LIN_CH2_OUT	2/5
3/5	CH1L	CH1(L)	19	LTC_MUT(H)	2/5
3/5	CH2L	CH2(L)	20	POWER_MUT	2/5
3/5	PHONE1	CH1_PHONE	21	TC_+6V	2/5
3/5	AG	PHONE_GND	22	TC_-6V	2/5
3/5	PHONE2	CH2_PHONE	23	TC_EE(L)	2/5
2/5	FMMONL	FM_MON(L)	24	TC_MUT(H)	2/5
2/5	TCOUT	TC_OUT(X)	25	TC_PB	2/5
2/5	AG	AA_GND	26	TC_REC_OUT	2/5
2/5	TCIN	TC_IN(X)	27	TC_REC(L)	2/5
2/5	LTCXIN	LTC_EXT_IN	28	TC_X2(L)	2/5
2/5	TCGRONL	TCG/TCR_ON(L)	29	FLY_OSC	4/5
2/5	LTCOUT	LTC_OUT	30	VERSR	4/5
2/5	LTCPBX	LTC_PB(X)	31	VERSL	4/5
2/5	AG	LTC_PB(G)	32	FLY_GND	4/5



Ref No.41000 Series.



# INTERFACE-1 SCHEMATIC DIAGRAM (E9: Page CBA-13) 1/5



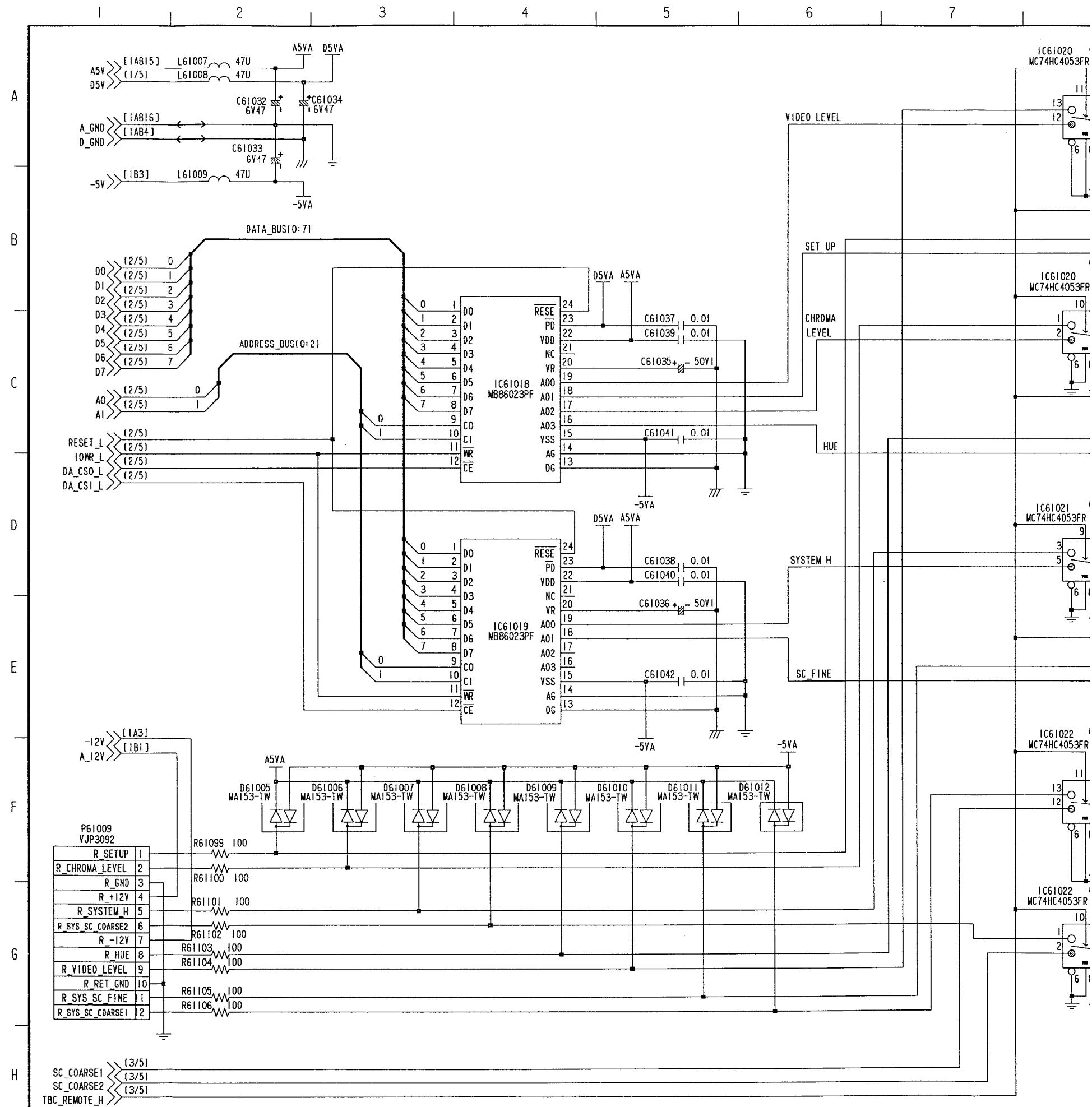
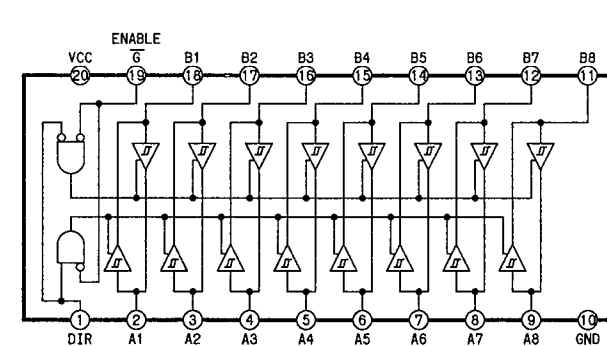
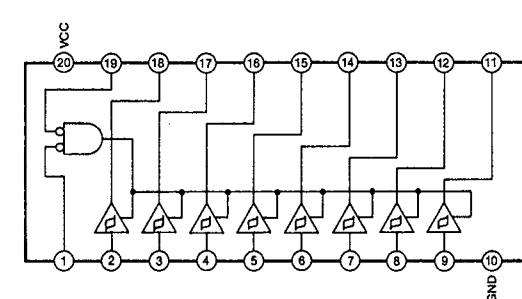
Ref No.61000 Series.



The diagram illustrates a digital logic circuit with the following components and connections:

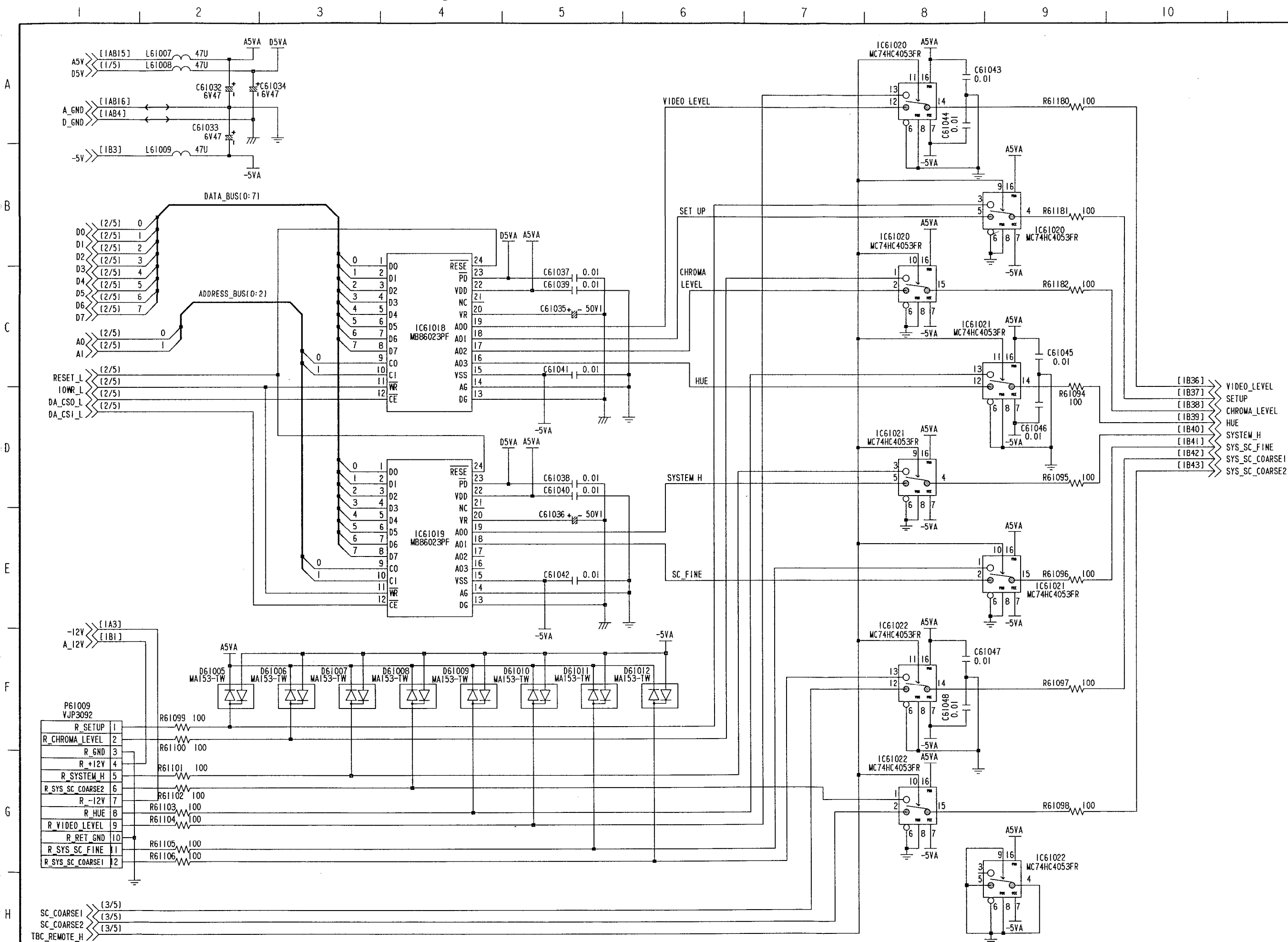
- ICs:**
  - IC61013, IC61014, IC61015, IC61016: MC74HC541F-R, MC74HC245AFR, MC74HC541F-R, MC74HC138AFR.
  - IC61009, IC61008: TC7W04FTE12L.
  - FL61004: VLP0054.
- Buses:**
  - CONTROL\_BUS(0:4)
  - ADDRESS\_BUS(0:17)
  - DATA\_BUS(0:7)
- Power and Ground:**
  - DSV (Digital Supply Voltage)
  - GND (Ground)
  - +12V
- Resistors and Capacitors:**
  - Resistors: R61001, R61002, R61003, R61004, R61005, R61006, R61007, R61008, R61009, R61010, R61011, R61012, R61013, R61014, R61015, R61016, R61017, R61018, R61019, R61020, R61021, R61022, R61023, R61024, R61025, R61026, R61027, R61028, R61029, R61030, R61031, R61032, R61033, R61034, R61035, R61036, R61037, R61038, R61039, R61040, R61041, R61042, R61043, R61044, R61045, R61046, R61047, R61048, R61049, R61050, R61051, R61052, R61053, R61054, R61055, R61056, R61057, R61058, R61059, R61060, R61061, R61062, R61063, R61064, R61065, R61066, R61067, R61068, R61069, R61070, R61071, R61072, R61073, R61074, R61075, R61076, R61077, R61078, R61079.
  - Capacitors: C61026, C61027, C61028, C61029, C61030, C61031, C61032, C61033, C61034, C61035, C61036, C61037, C61038, C61039, C61040, C61041, C61042, C61043, C61044, C61045, C61046, C61047, C61048, C61049, C61050, C61051, C61052, C61053, C61054, C61055, C61056, C61057, C61058, C61059, C61060, C61061, C61062, C61063, C61064, C61065, C61066, C61067, C61068, C61069, C61070, C61071, C61072, C61073, C61074, C61075, C61076, C61077, C61078, C61079.
- Logic Functions:**
  - AND gates (IC61009, IC61008)
  - OR gates (IC61013, IC61015)
  - Multiplexers (IC61014, IC61016)
  - Buffers (IC61013, IC61015)





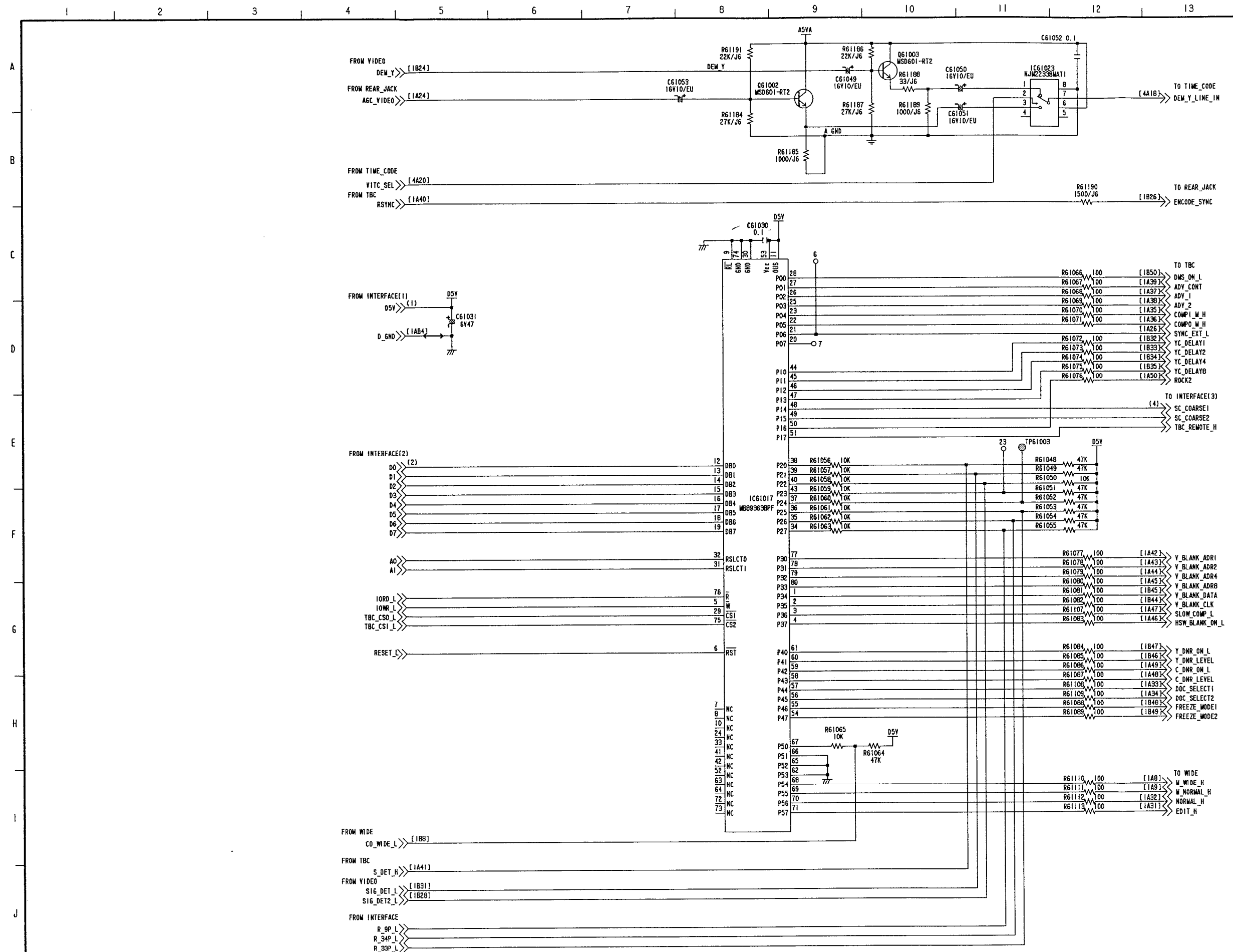


# INTERFACE-4 SCHEMATIC DIAGRAM (E9: Page CBA-13) 4/5

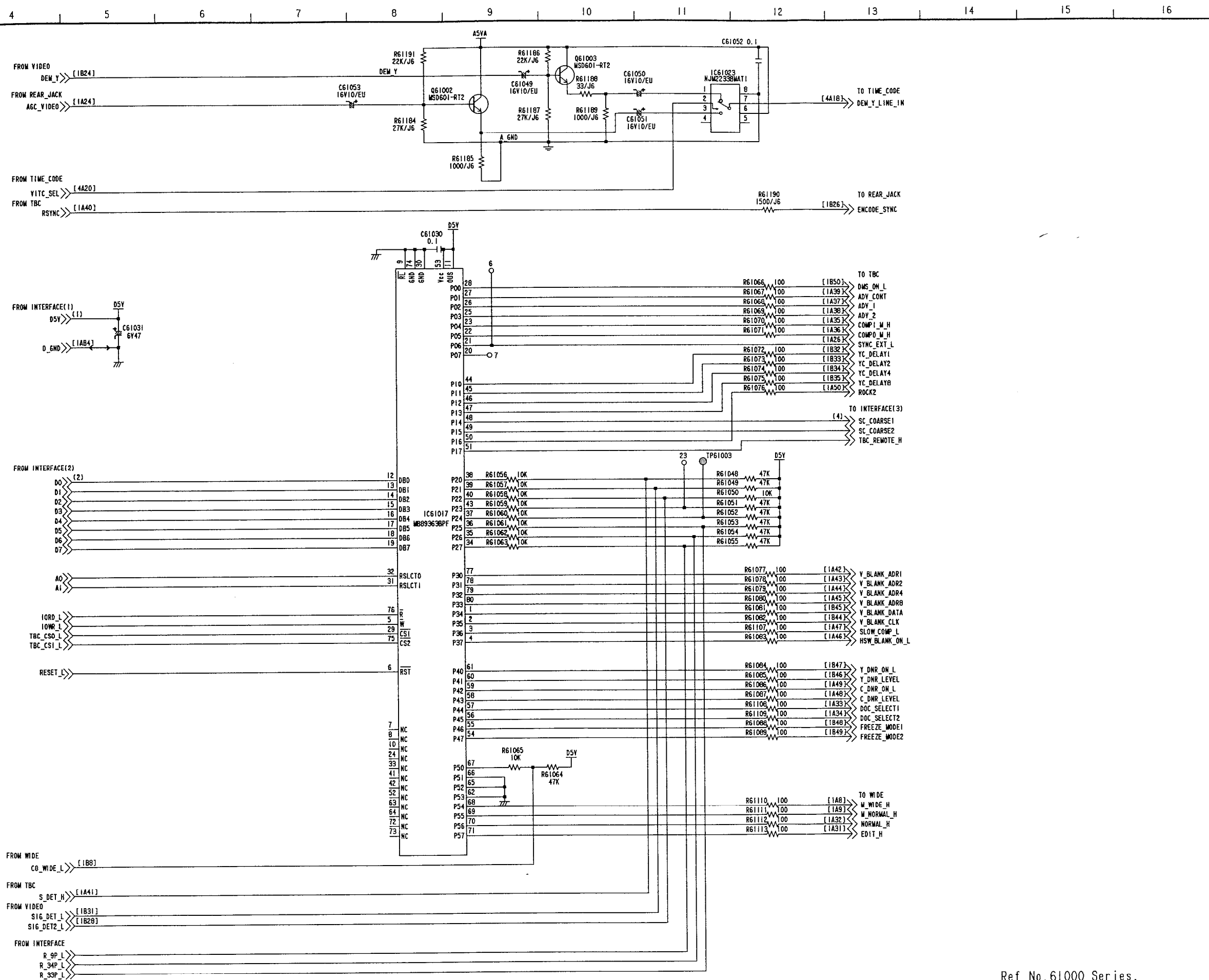




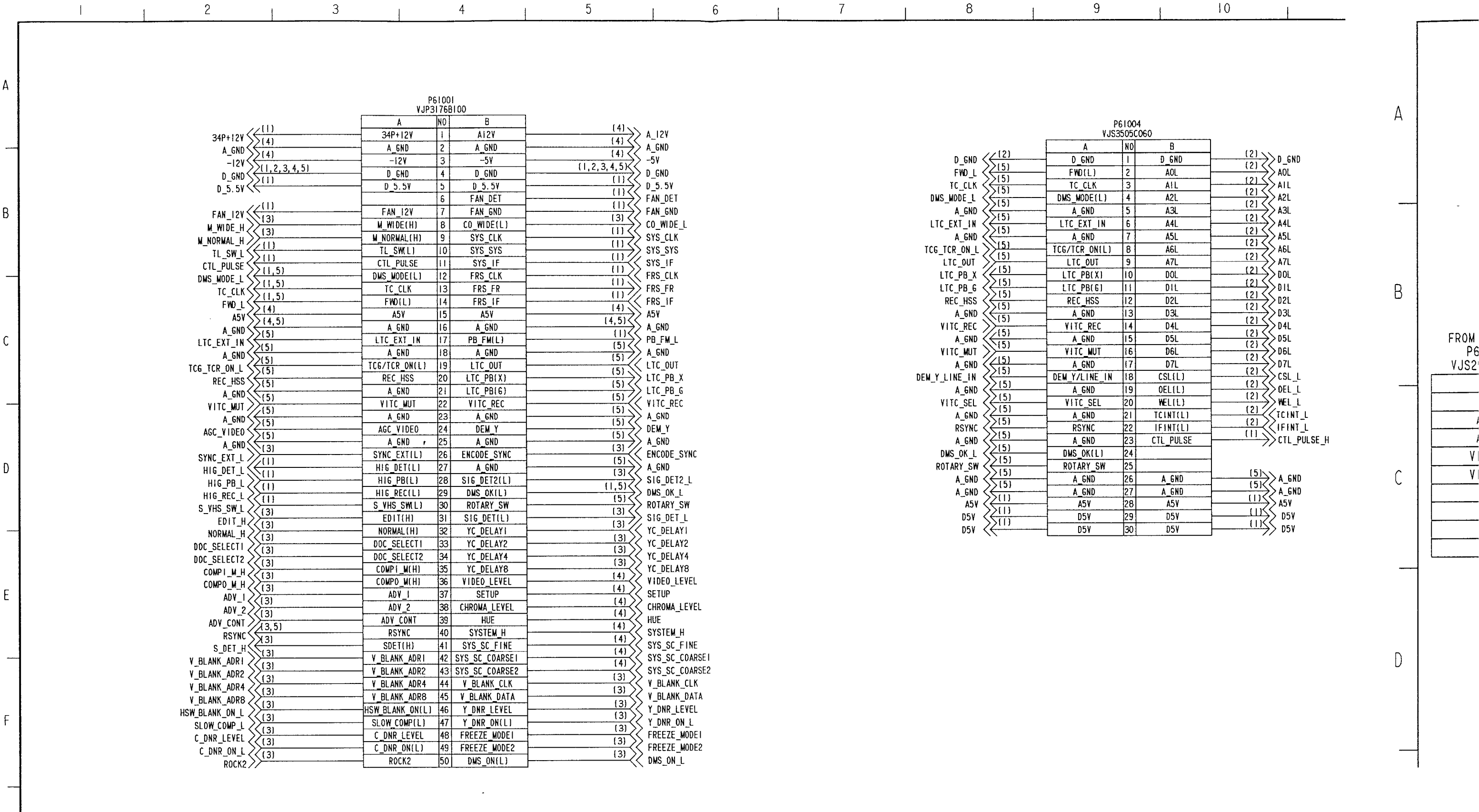
# INTERFACE-3 SCHEMATIC DIAGRAM (E9: Page CBA-13) 3/5



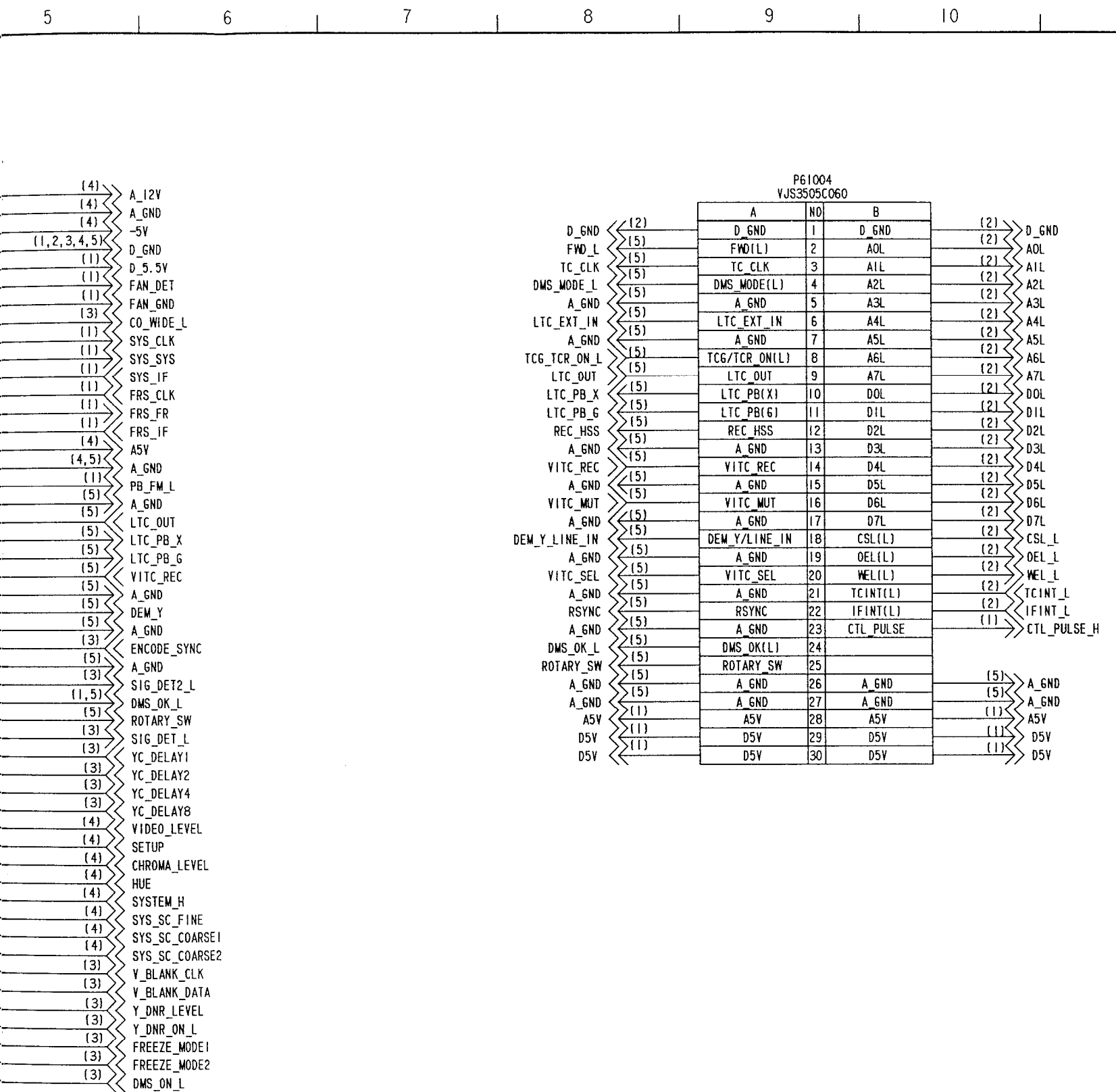




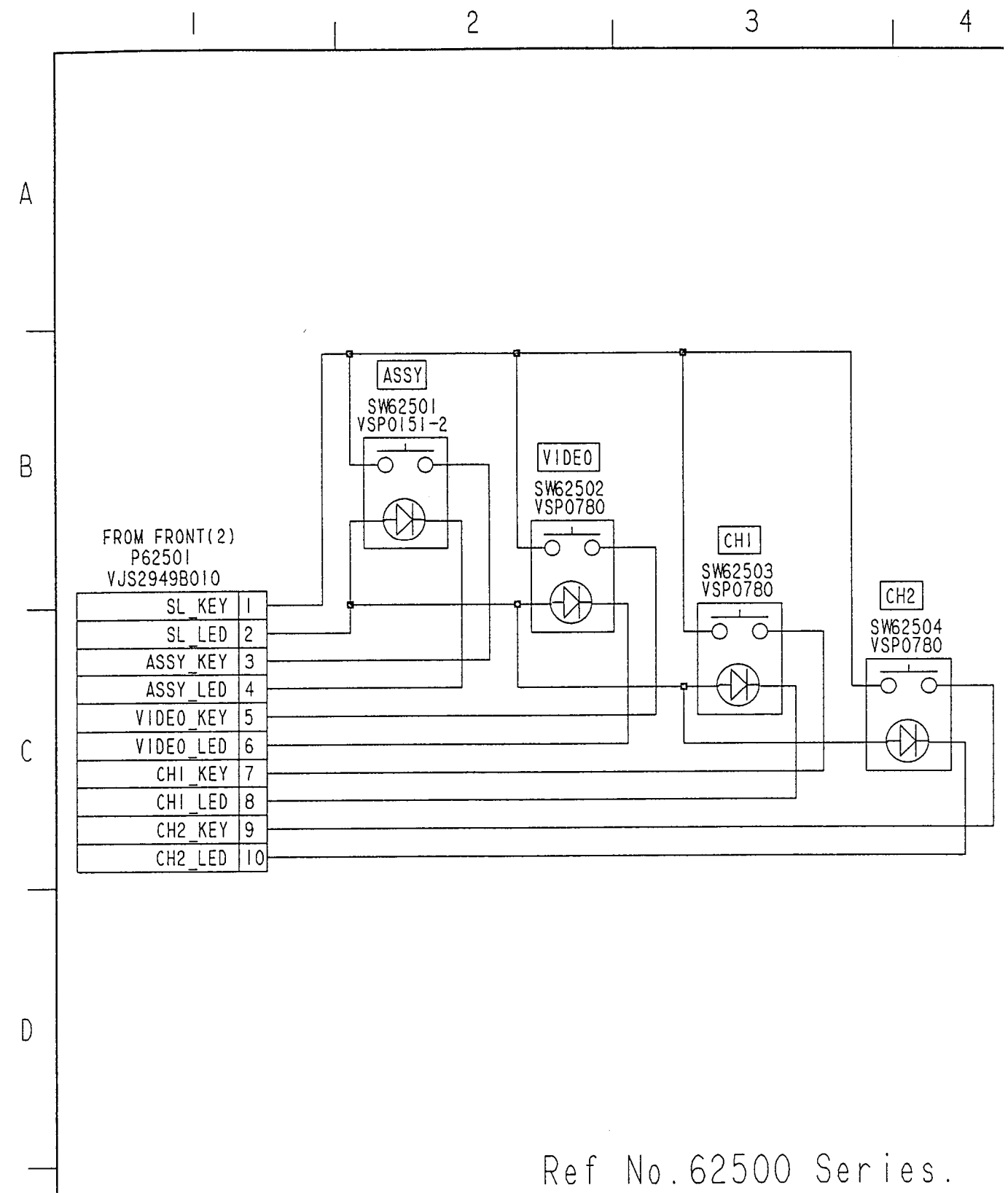








# FRONT LED SCHEMATIC DIAGRAM (E17: Page CBA-14)





A horizontal number line with tick marks labeled 1 through 14. The line is slightly curved upwards from left to right. The labels are placed above the tick marks.









The schematic diagram illustrates the LED driver and control circuitry, organized into a grid with columns 1-9 and rows A-F.

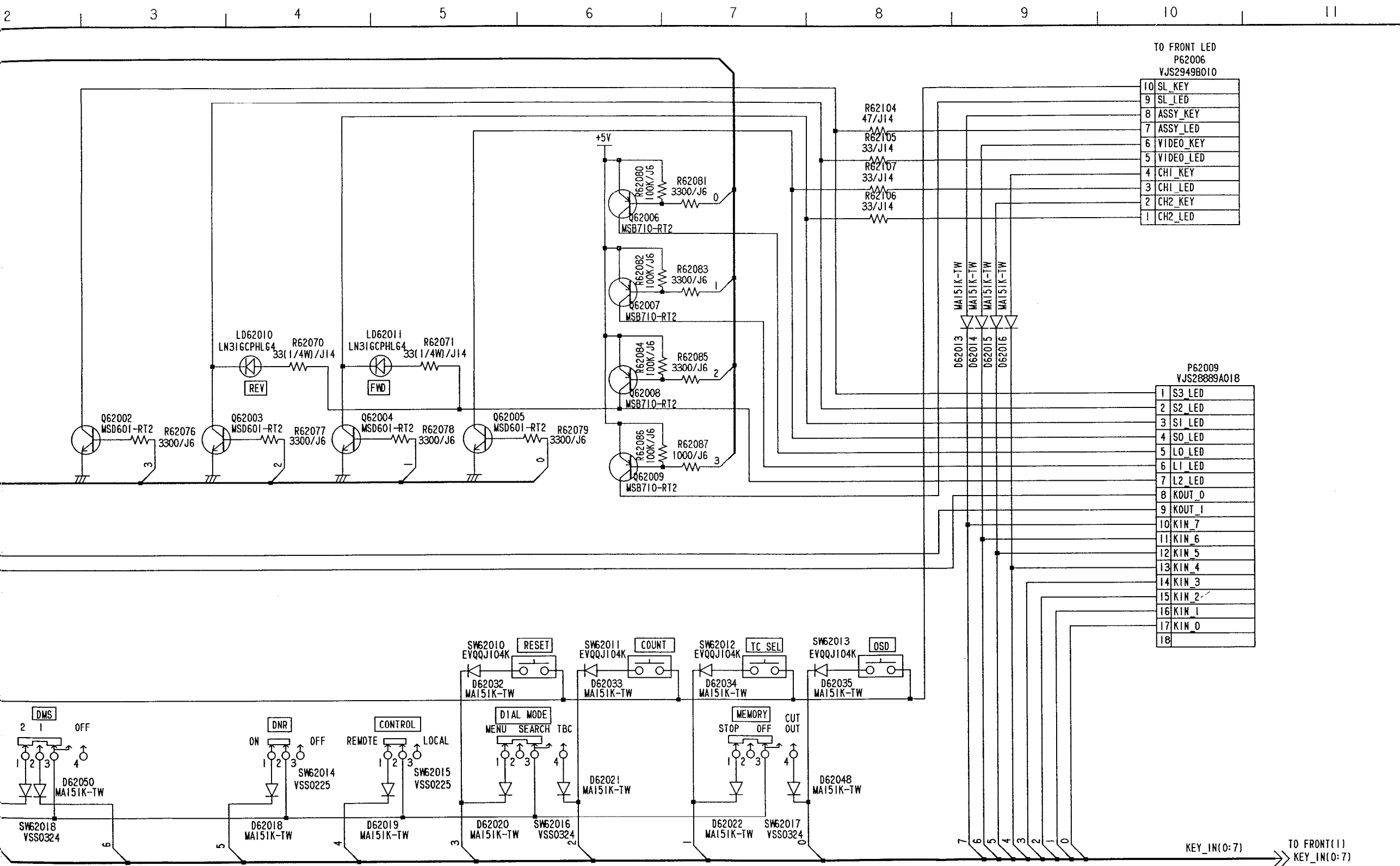
**LED Driver Section (Rows A-C):**

- LEDs:** D62010 (REV), D62011 (FWD), D62013, D62014, D62015, D62016 (all MA151K-TW).
- Transistors:** Q62002, Q62003, Q62004, Q62005 (MSD601-RT2); Q62006, Q62007, Q62008, Q62009 (MSB710-RT2).
- Resistors:** R62070, R62071, R62076, R62077, R62078, R62079, R62080, R62081, R62082, R62083, R62084, R62085, R62086, R62087, R62088.
- Power:** +5V supply connected to the driver circuit.
- Inputs:** FROM FRONT(1) LED\_SCN(0:3) and LED\_OUT(0:3).

**Control Section (Rows D-F):**

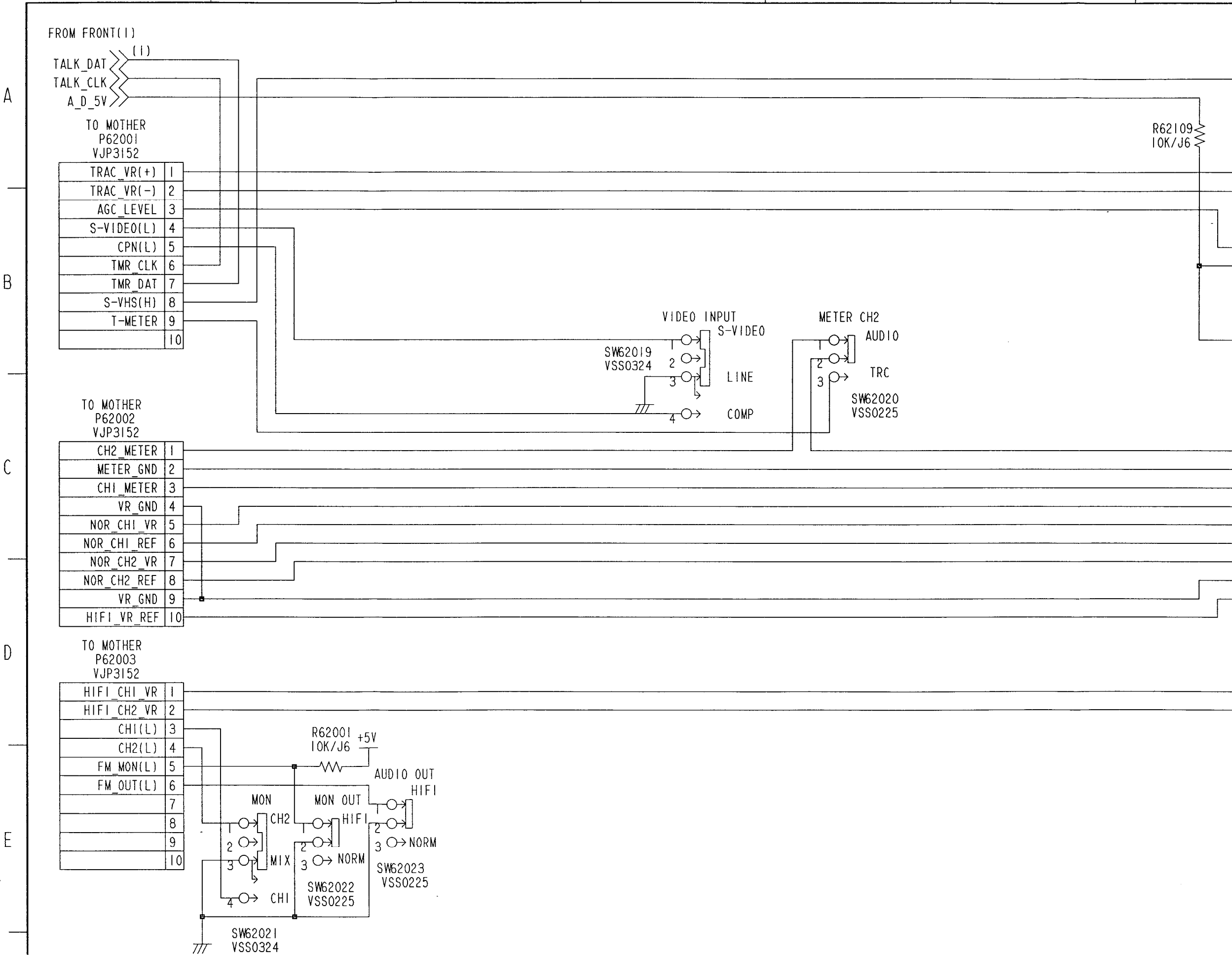
- Switches:** SW62010 (RESET), SW62011 (COUNT), SW62012 (TC SEL), SW62013 (OSD), SW62014 (DNR), SW62015 (CONTROL), SW62016 (DIAL MODE), SW62017 (MEMORY).
- Diodes:** D62032, D62033, D62034, D62035 (MA151K-TW); D62018, D62019, D62020, D62021, D62022 (MA151K-TW); D62049, D62050, D62048 (MA151K-TW).
- Resistors:** VSS0225, VSS0324.
- Inputs:** FROM FRONT(1) K\_S1, K\_S0, K\_S2, K\_S3.



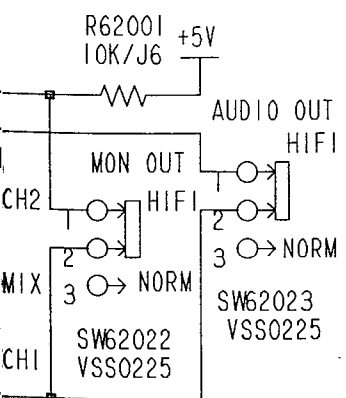
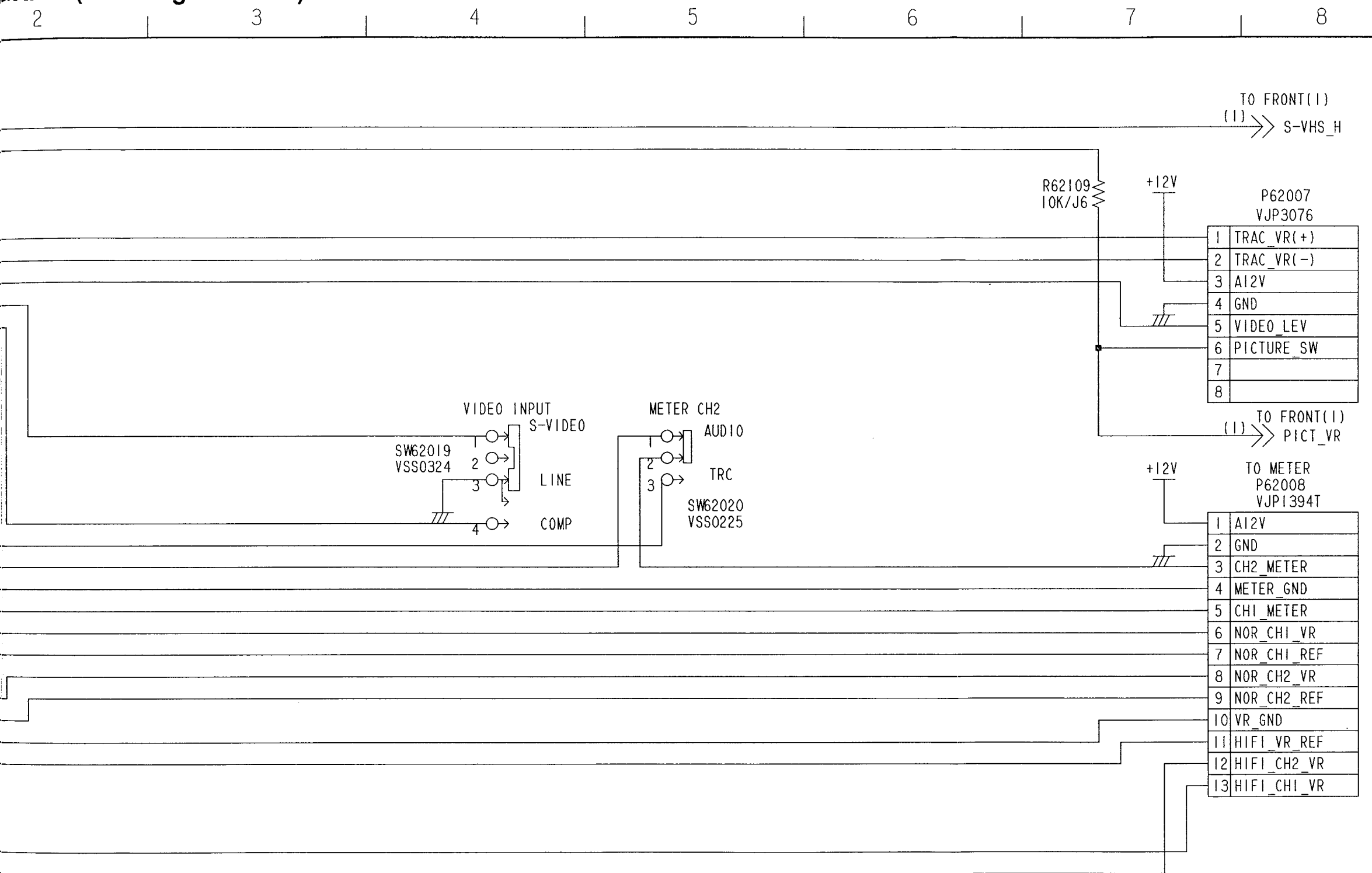




FRONT-3 SCHEMATIC DIAGRAM (E16: Page CBA-14) 3/4

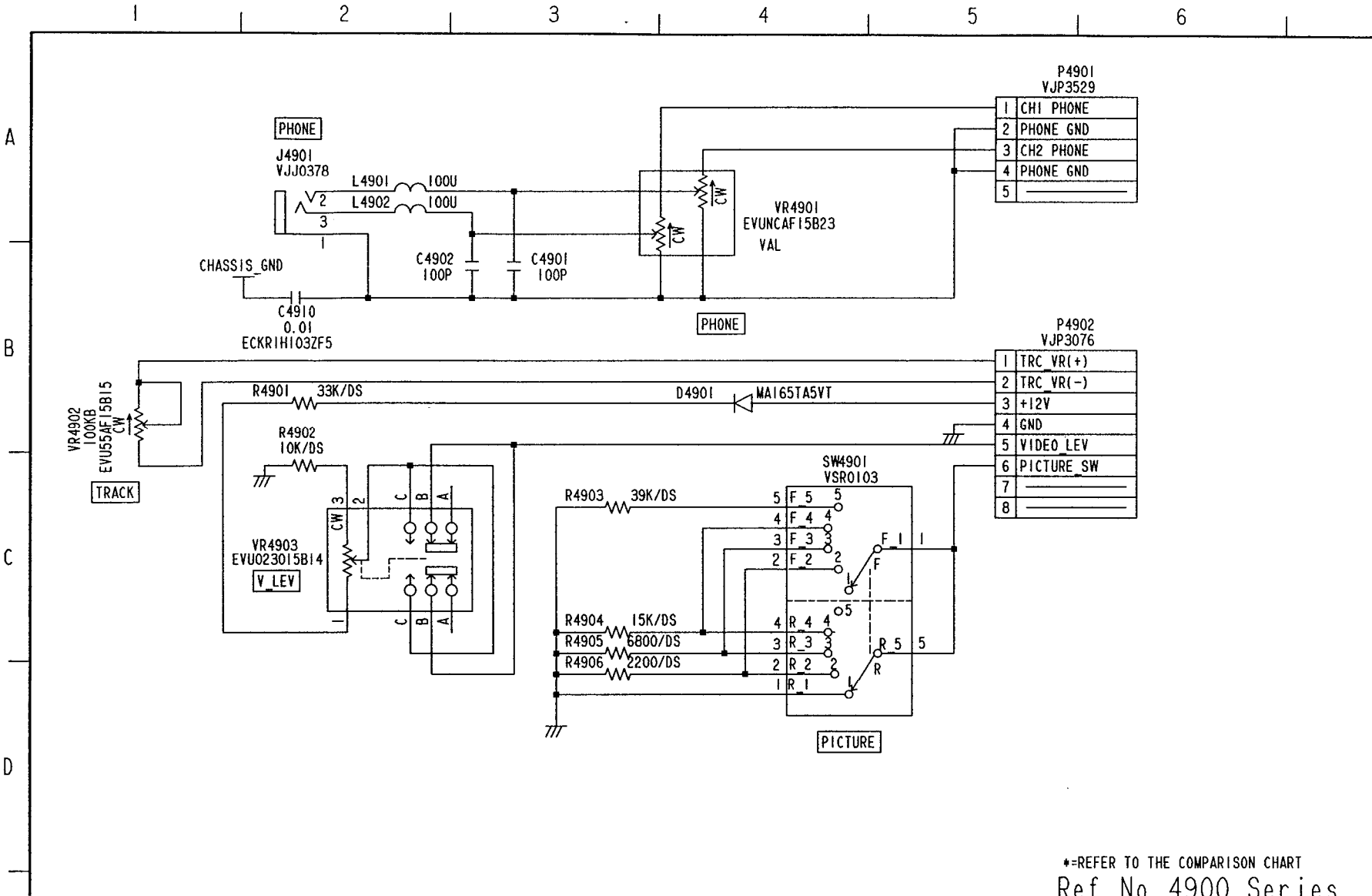








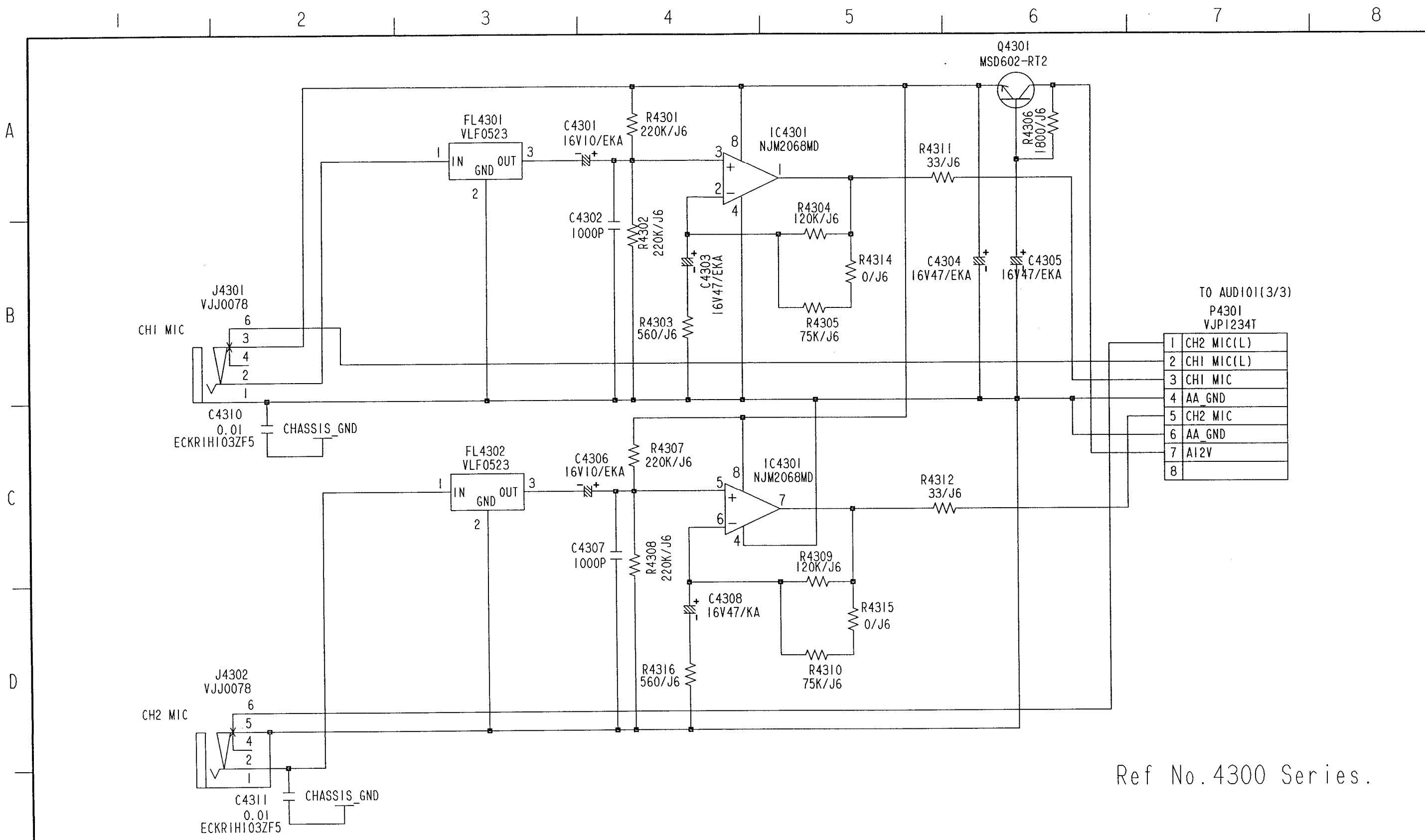
\$REF\$	T	P	PAL	ON
C62006	*PAT	*PAT	*PAT	50V22
D62001	*PAT	*PAT	*PAT	11EQS04TA1
D62003	*PAT	*PAT	*PAT	MA700A-TA
D62004	*PAT	*PAT	*PAT	MA4300-L
J62001	0/J6	*PAT/J6	*PAT/J6	0/J6
J62002	*PAT/J6	*PAT/J6	0/J6	0/J6
J62003	*PAT/J6	*PAT/J6	*PAT/J6	0/J6
J62004	*PAT/J6	*PAT/J6	*PAT/J6	0/J6
J62006	*PAT/J6	*PAT/J6	*PAT/J6	0/J6
Q62001	*PAT	*PAT	*PAT	2SB642-RT2
R62002	*PAT/J14	*PAT/J14	*PAT/J14	1500/J14
R62060	*PAT/J14	*PAT/J14	*PAT/J14	1000/J14
TP62001	*PAT	*PAT	*PAT	AVSD1
TP62002	*PAT	*PAT	*PAT	AVSD2
TP62003	*PAT	*PAT	*PAT	AVSD3
TP62005	*PAT	*PAT	*PAT	AVSD5
TP62006	*PAT	*PAT	*PAT	AVSD6
TP62007	*PAT	*PAT	*PAT	AVSD7
TP62008	*PAT	*PAT	*PAT	AVSD8
TP62009	*PAT	*PAT	*PAT	AVSD9
TP62010	*PAT	*PAT	*PAT	AVSD10
TP62011	*PAT	*PAT	*PAT	AVSD11
TP62012	*PAT	*PAT	*PAT	AVSD12



\*=REFER TO THE COMPARISON CHART  
Ref No.4900 Series.

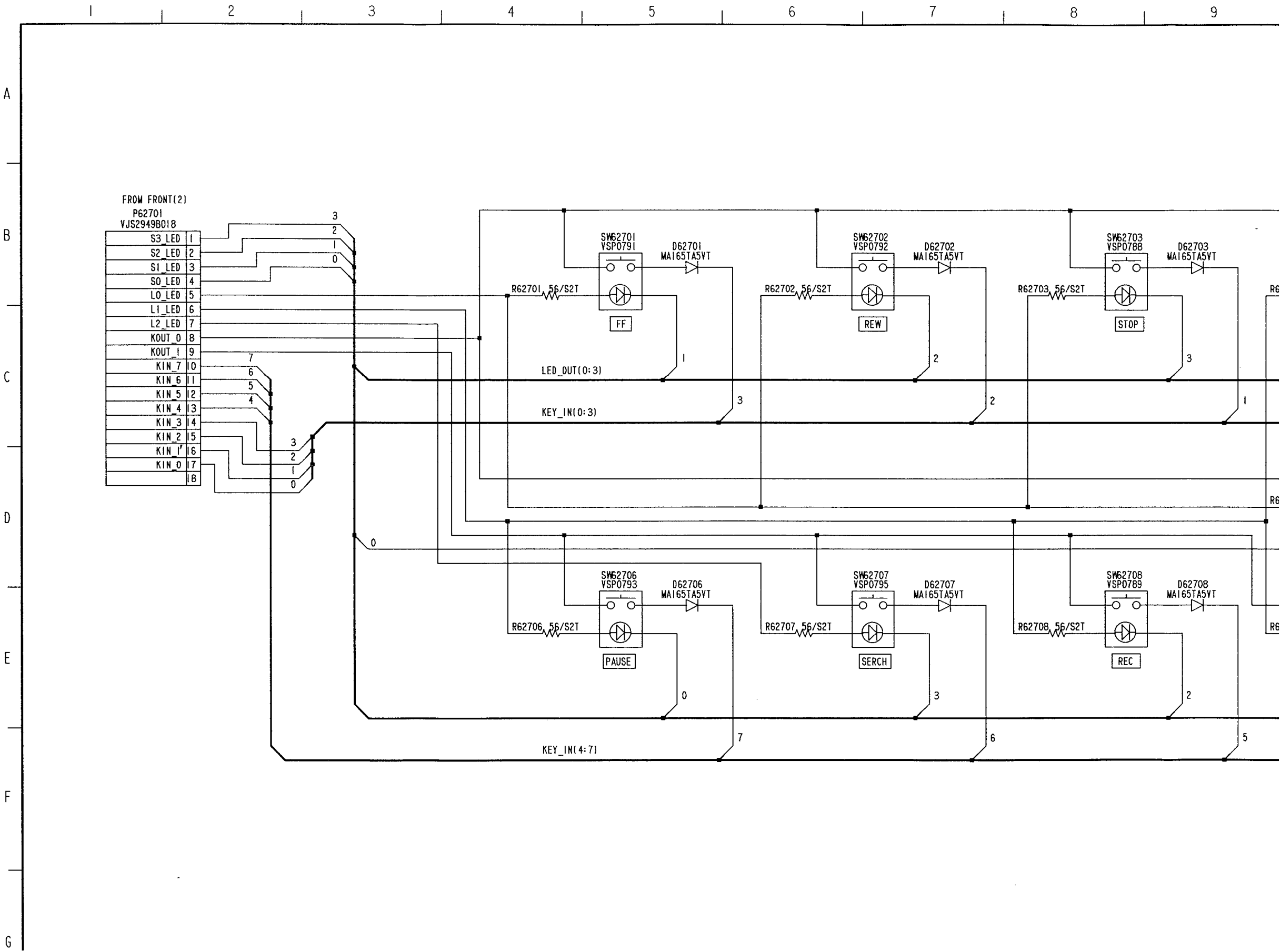


MIC JACK SCHEMATIC DIAGRAM (E20: Page CBA-4)

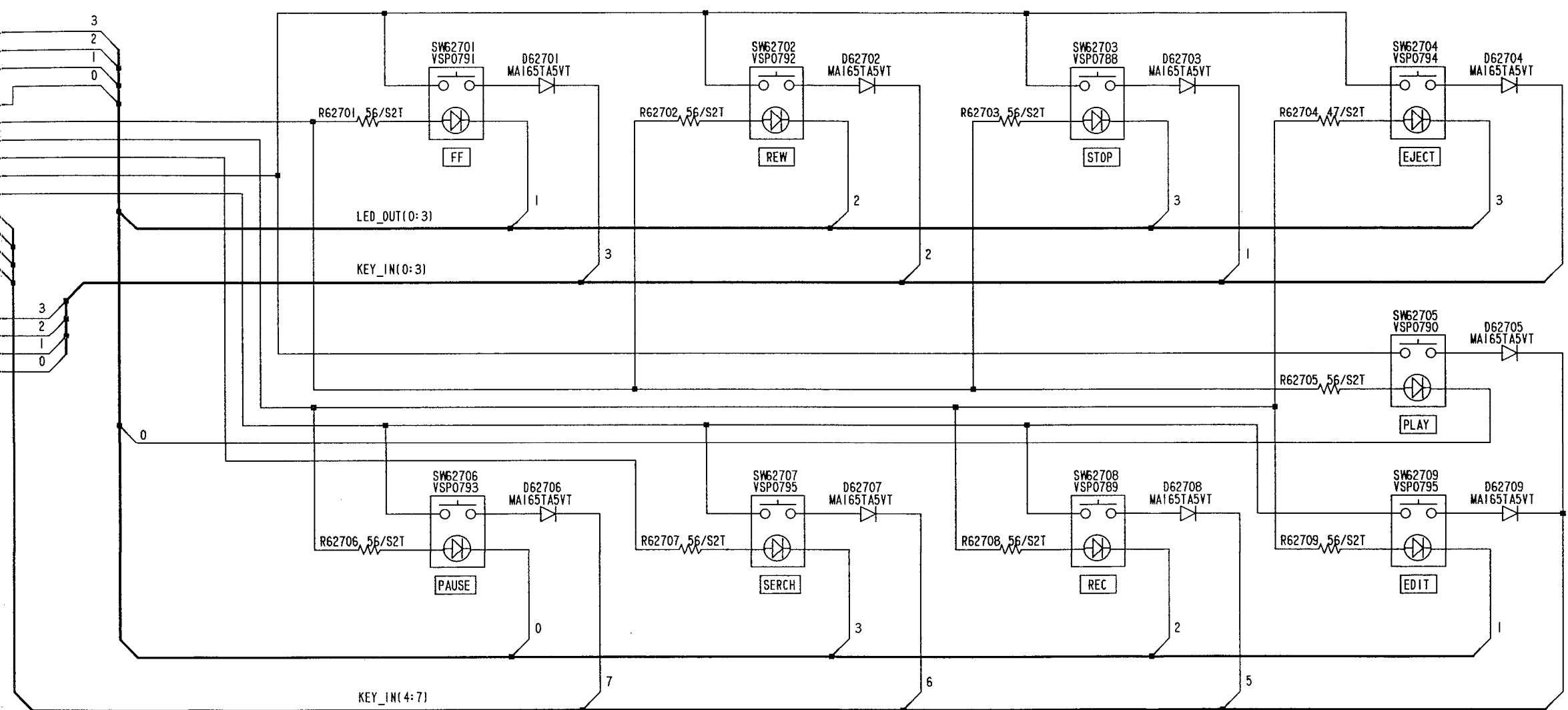




KEYBOARD SCHEMATIC DIAGRAM (E18: Page CBA-15)



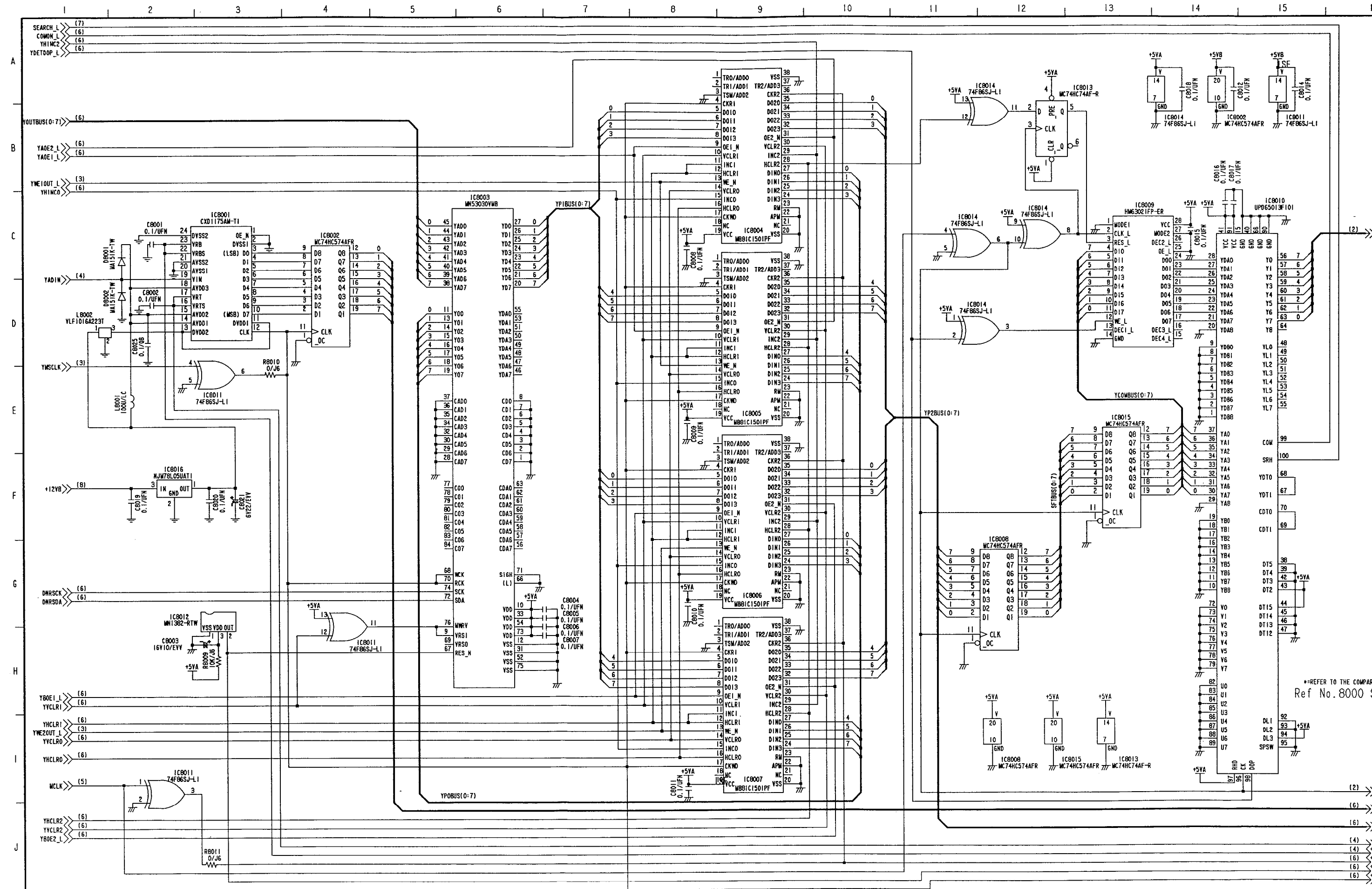




Ref No.62700 Series.

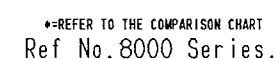


# Y MEMORY-1 SCHEMATIC DIAGRAM (E11: Page CBA-9) 1/9



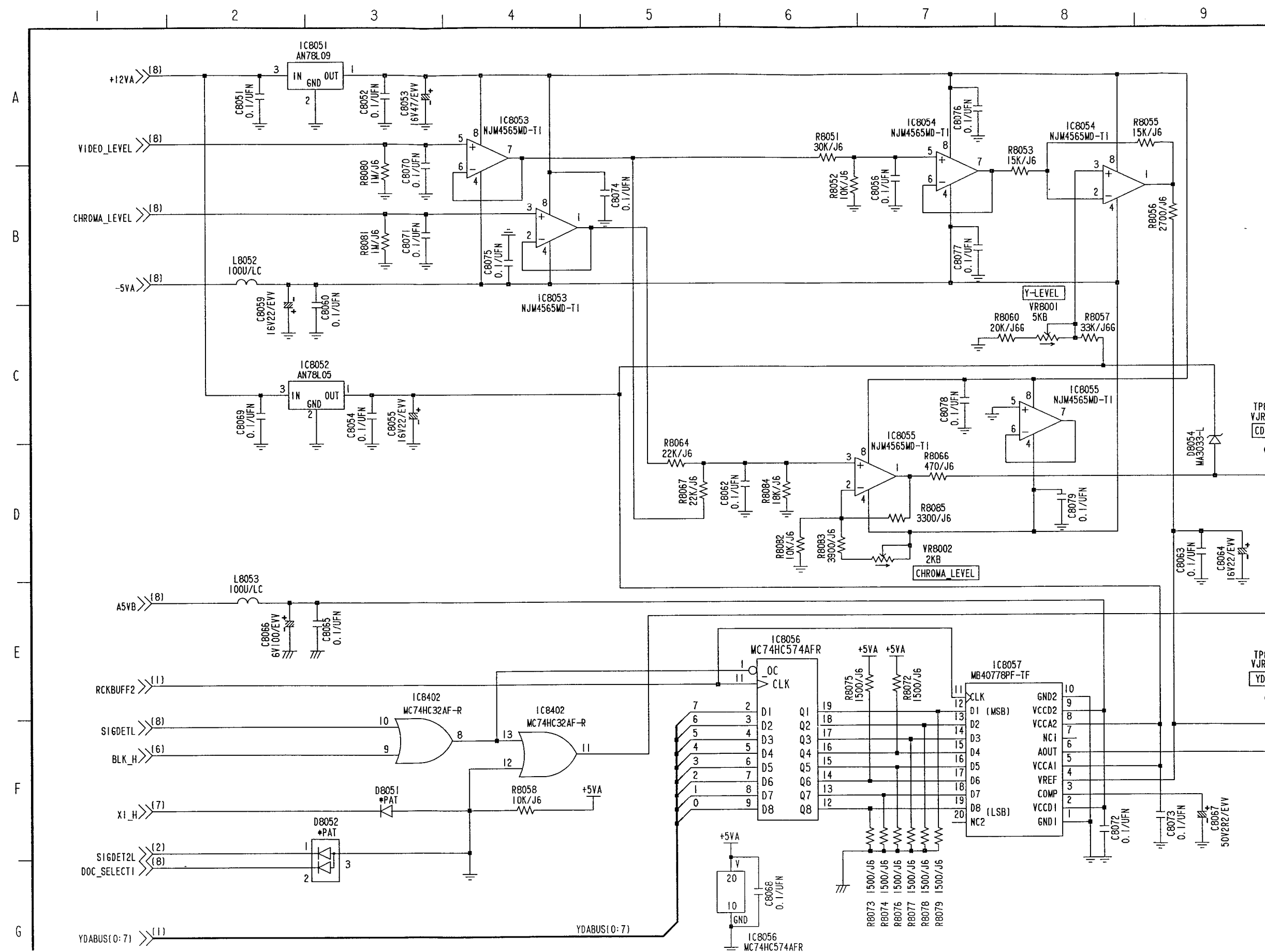
\*REFER TO THE COMP. Ref No. 8000 S



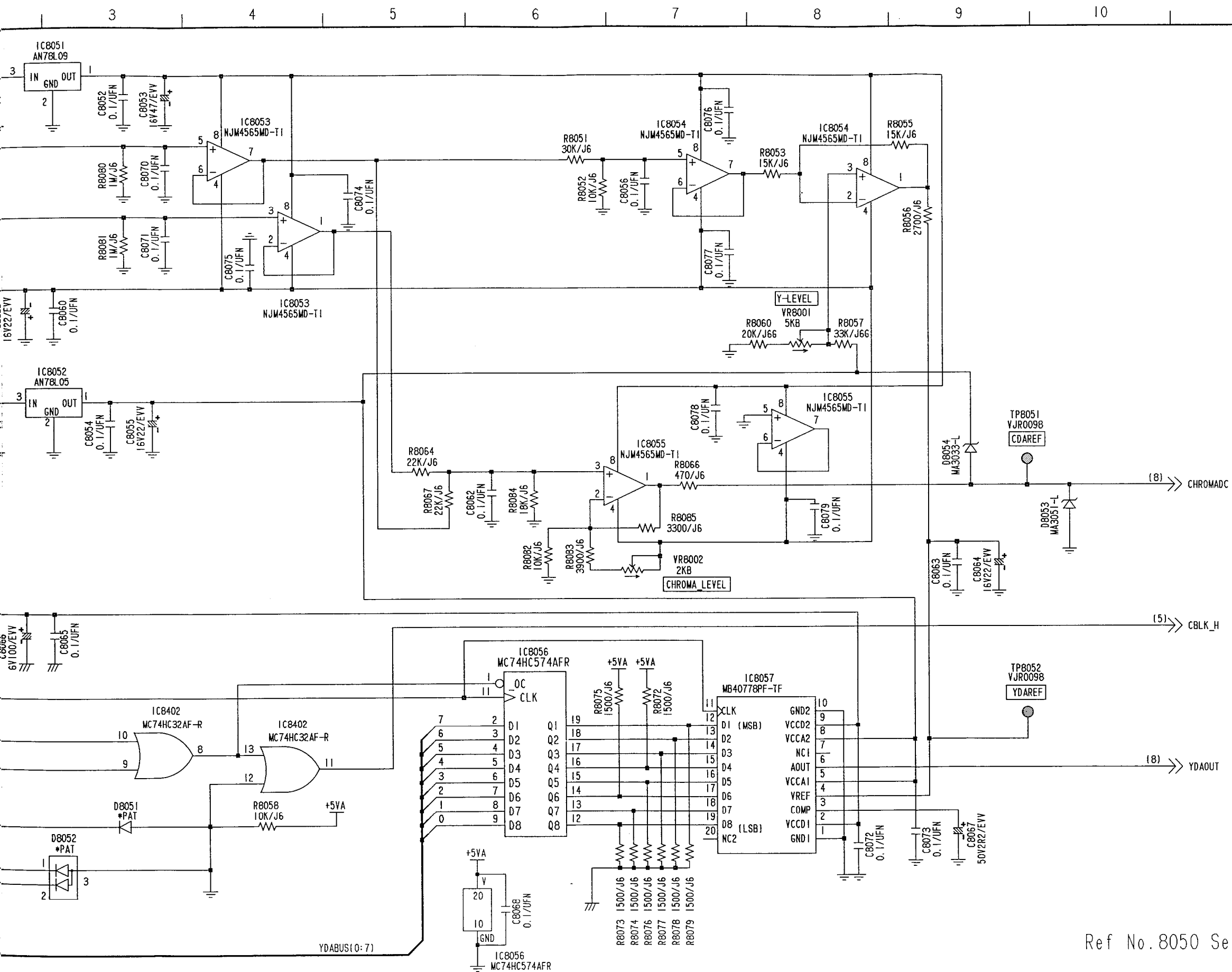




## Y MEMORY-2 SCHEMATIC DIAGRAM (E11: Page CBA-9) 2/9







Ref No.8050 Series.

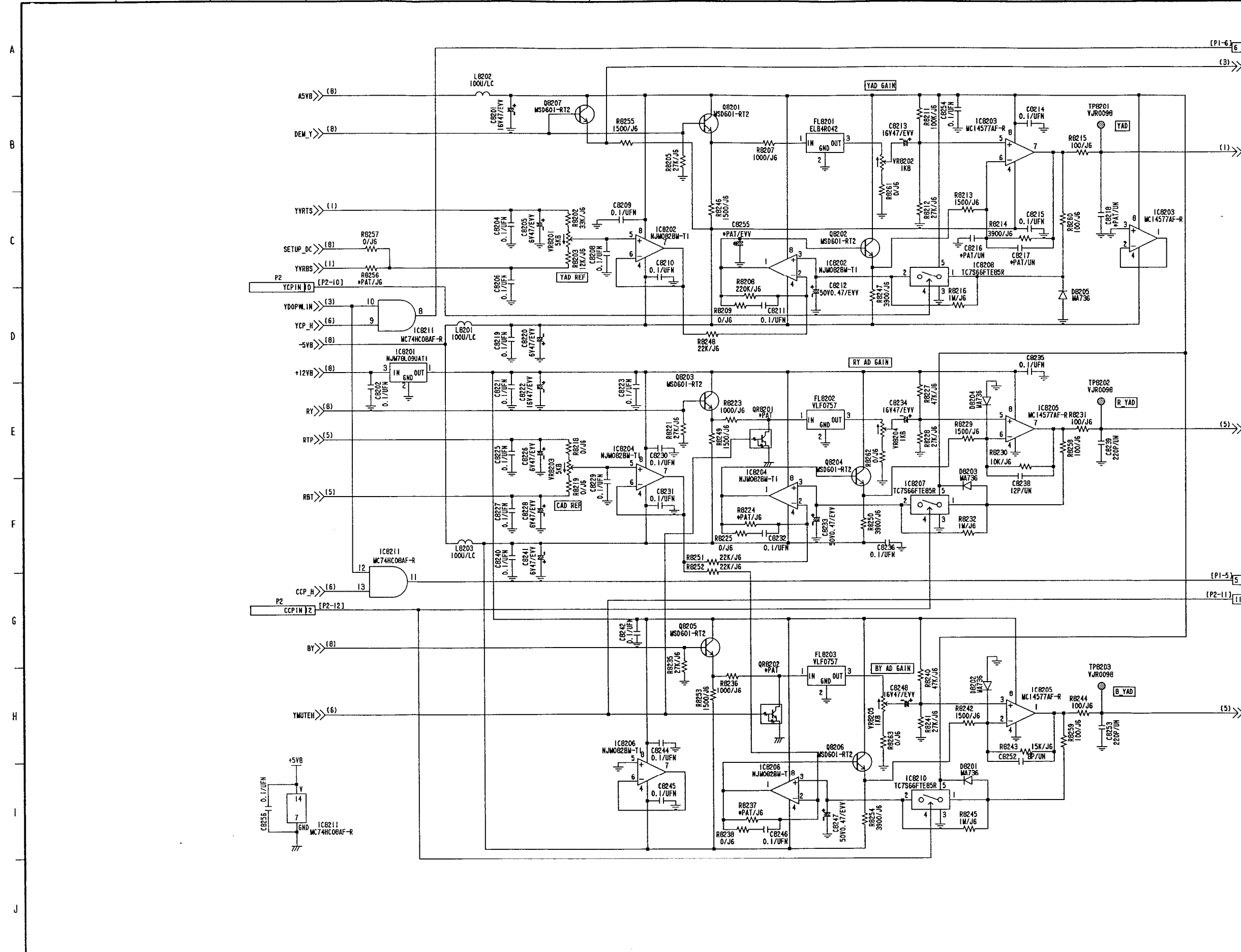


[illegible]



[illegible]



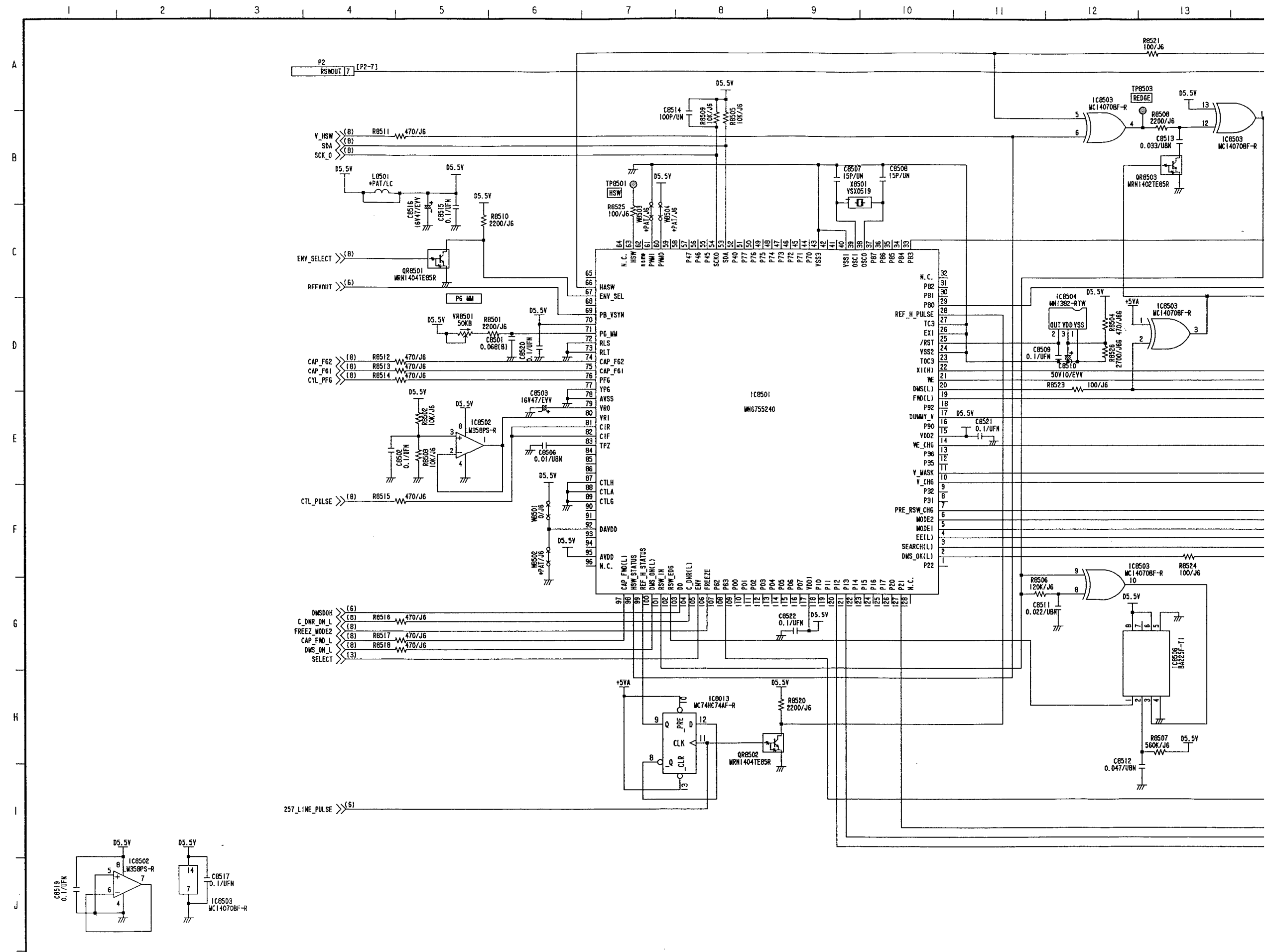




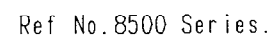




# D.M.S SCHEMATIC DIAGRAM (E11: Page CBA-9) 7/9





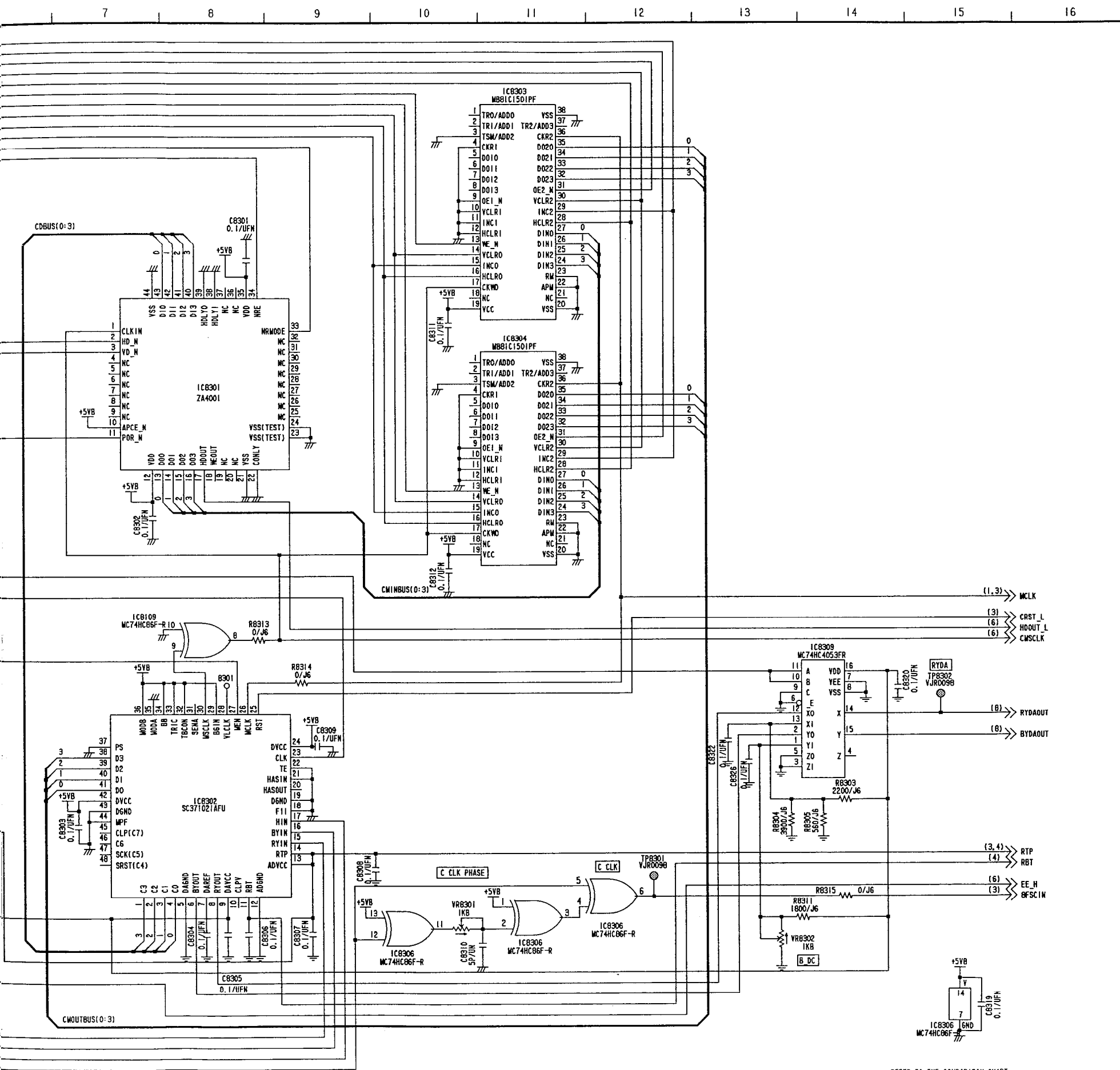




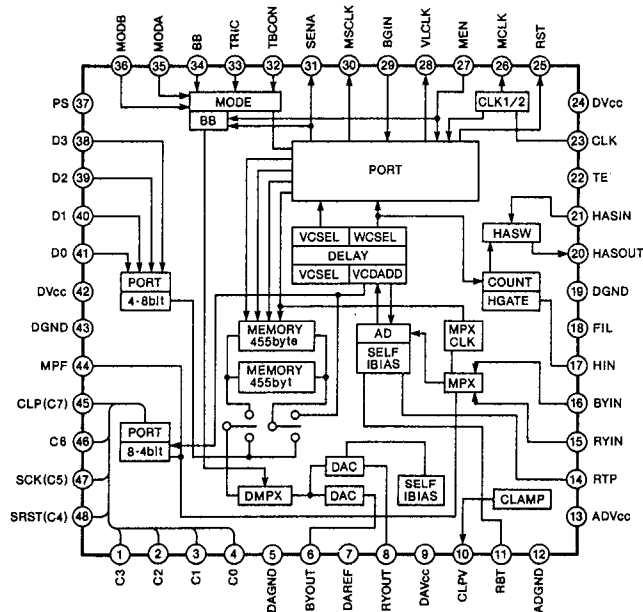
[illegible]

•=REFER TO THE COMPARISON CHART  
Ref No. 8300 Series

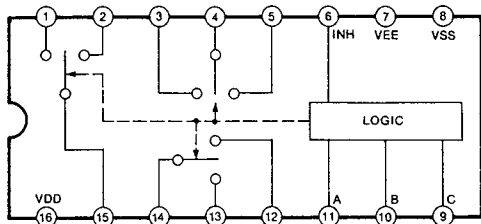




IC8302  
SC371021AFU



IC8309  
MC74HC4053FR



==REFER TO THE COMPARISON CHART  
Ref No.8300 Series.





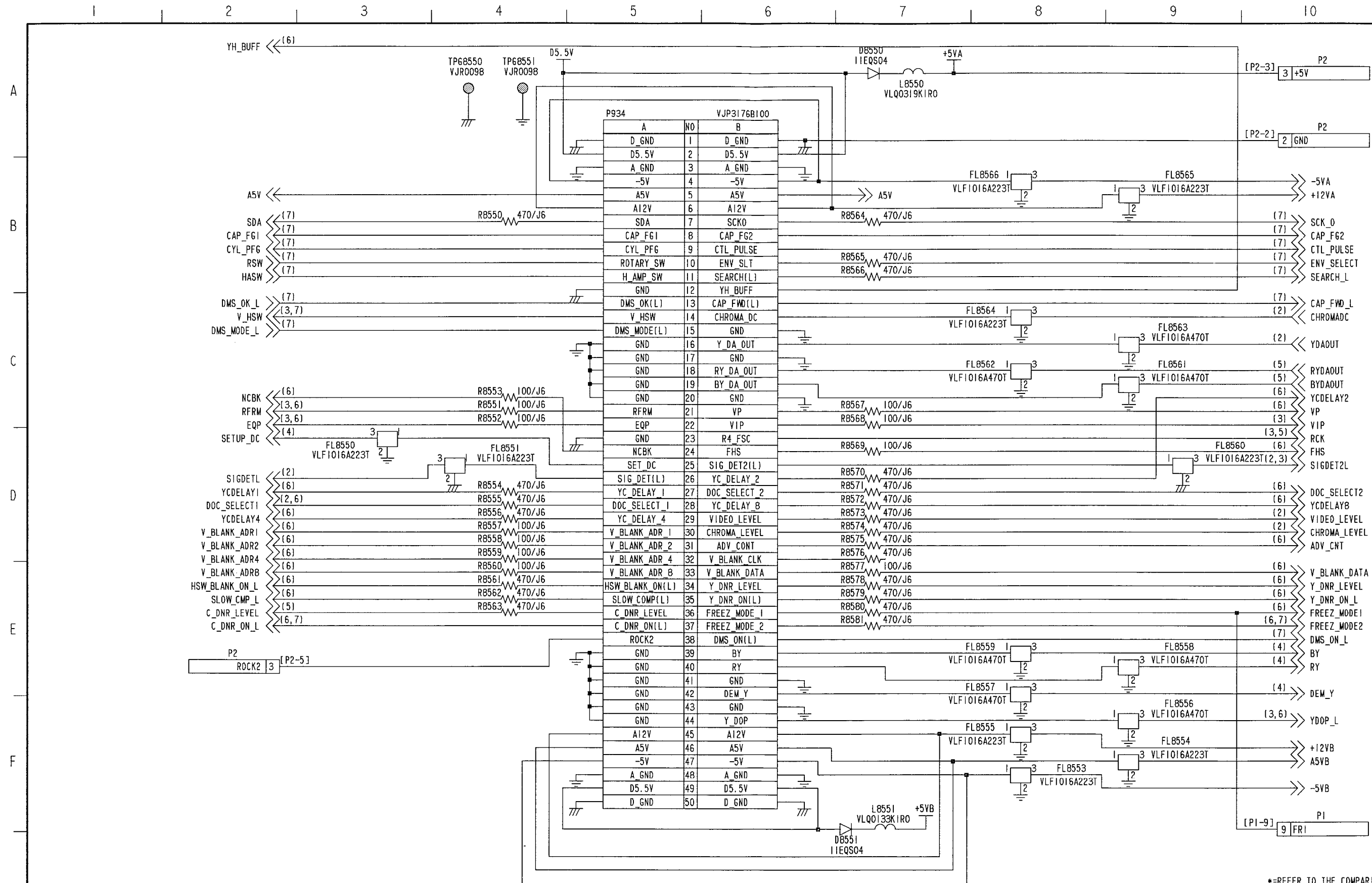




\*=REFER TO THE COMPARISON CHART  
Ref. No. 8400 Series

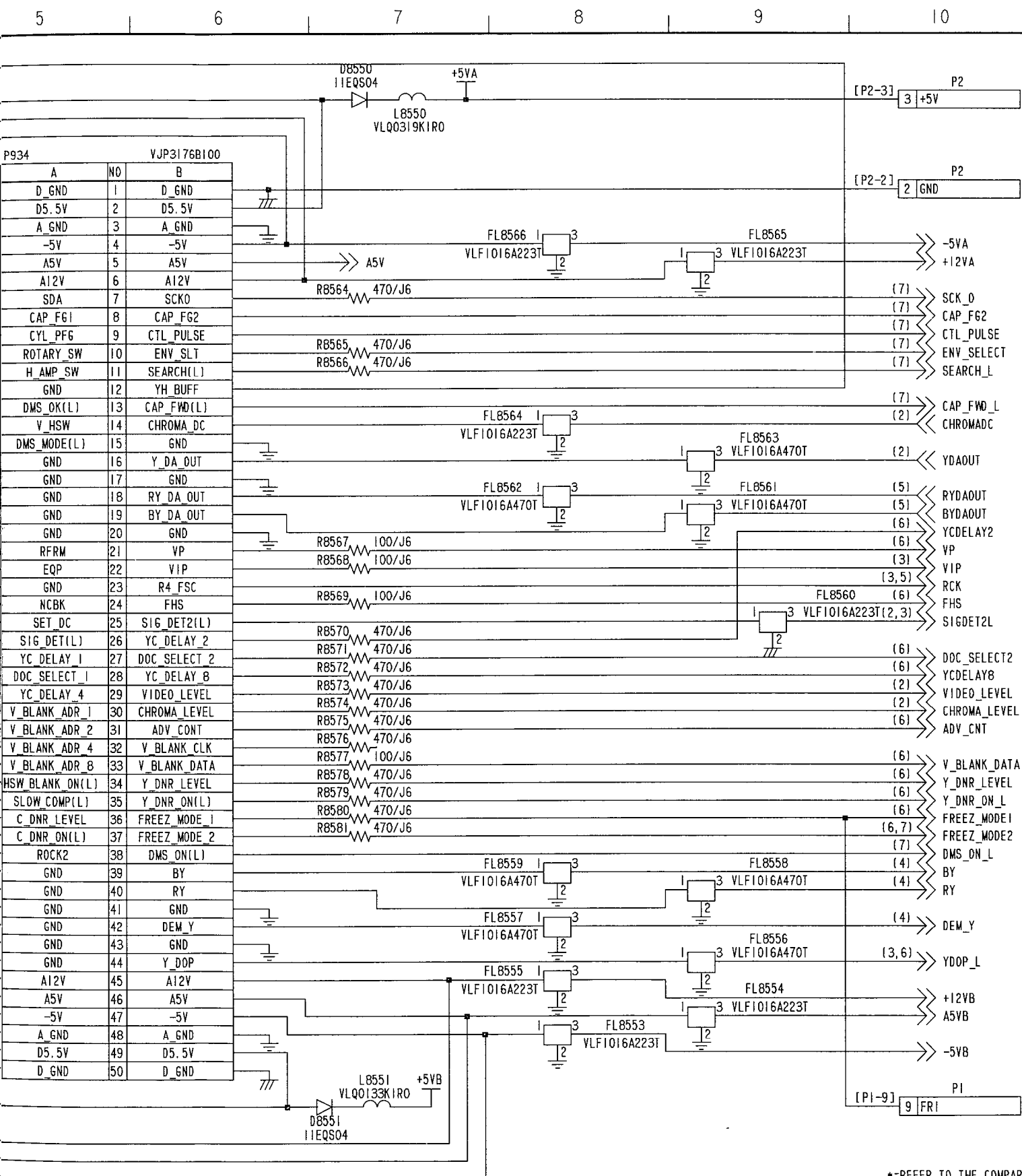


TBC (1) CONNECTION SCHEMATIC DIAGRAM (E11: Page CBA-9) 8/9



\*=REFER TO THE COMPARISON CHART  
Ref No.8550 Series.





\*-REFER TO THE COMPARISON CHART  
Ref No. 8550 Series.

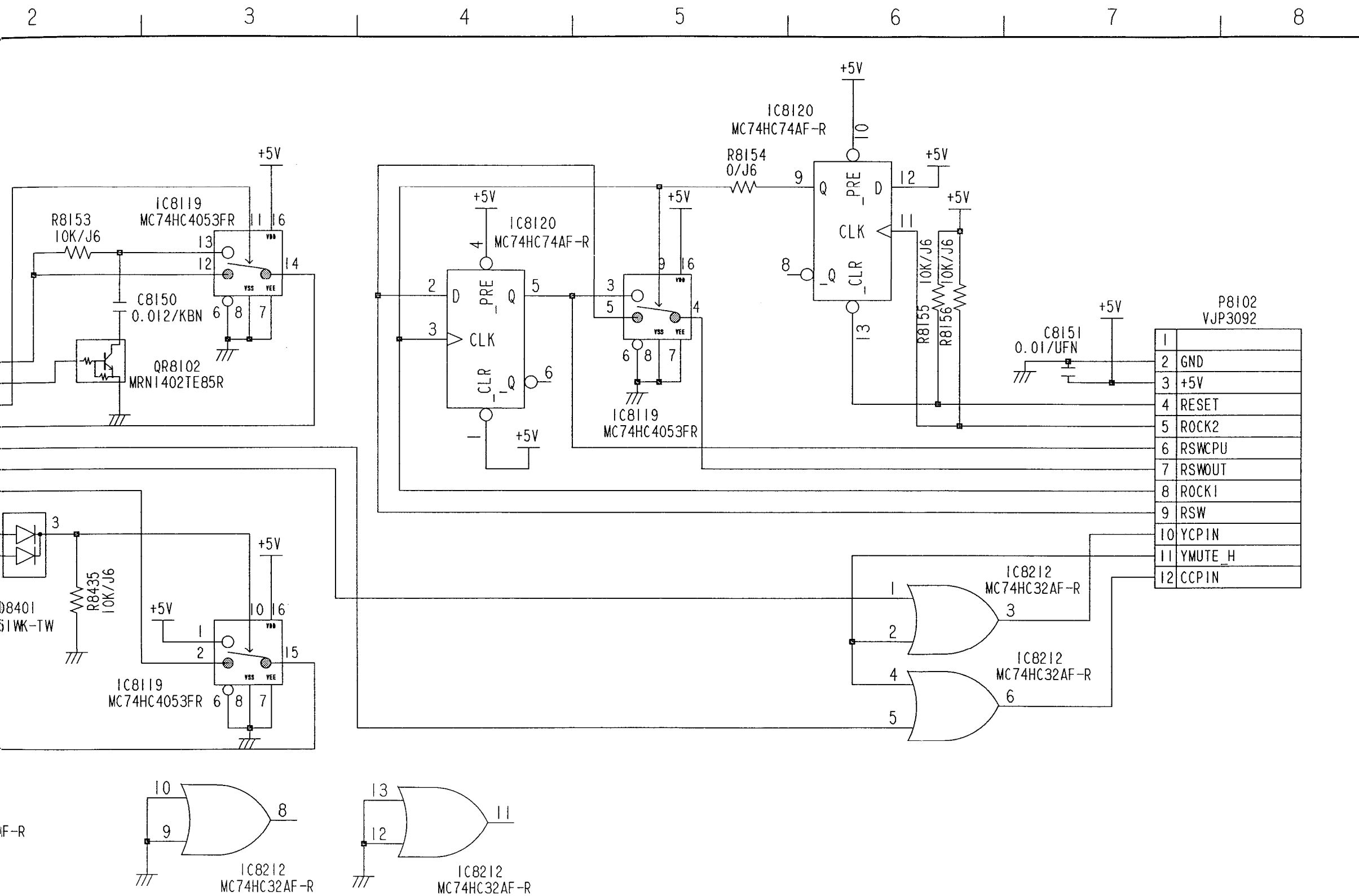
\$REF\$	NTSC	PAL	ON
C8216	*PAT/UN	*PAT/UN	10P/UN
C8217	*PAT/UN	*PAT/UN	10P/UN
C8218	*PAT/UN	*PAT/UN	10P/UN
C8255	*PAT/UN	*PAT/UN	16V1/EVV
D8051	*PAT	*PAT	MA151A-TW
D8052	*PAT	*PAT	MA151WA-TW
L8501	*PAT/LC	*PAT/LC	100U/LC
QR8201	*PAT	*PAT	MRN1403-T2
QR8202	*PAT	*PAT	MRN1403-T2
R8142	*PAT/J6	0/J6	0/J6
R8224	*PAT/J6	*PAT/J6	0/J6
R8237	*PAT/J6	*PAT/J6	0/J6
R8256	*PAT/J6	*PAT/J6	0/J6
R8310	*PAT/J6	*PAT/J6	0/J6
R8401	*PAT/J6	0/J6	0/J6
R8402	*PAT/J6	*PAT/J6	0/J6
R8408	*PAT/J6	*PAT/J6	0/J6
R8410	*PAT/J6	*PAT/J6	0/J6
R8413	*PAT/J6	*PAT/J6	0/J6
R8414	*PAT/J6	*PAT/J6	0/J6
R8417	*PAT/J6	*PAT/J6	0/J6
R8419	*PAT/J6	*PAT/J6	0/J6
R8424	*PAT/J6	*PAT/J6	0/J6
R8425	*PAT/J6	*PAT/J6	0/J6
R8426	*PAT/J6	*PAT/J6	0/J6
R8427	*PAT/J6	*PAT/J6	0/J6
R8431	*PAT/J6	*PAT/J6	0/J6
R8432	*PAT/J6	*PAT/J6	0/J6
R8433	*PAT/J6	*PAT/J6	0/J6
R8522	*PAT/J6	*PAT/J6	0/J6
W8502	*PAT/J6	*PAT/J6	0/J6
W8503	*PAT/J6	*PAT/J6	0/J6
W8504	*PAT/J6	*PAT/J6	0/J6



The circuit diagram illustrates a 4-bit counter implemented using two 74HC4053FR (IC8119) and two 74HC74AF-R (IC8120) ICs. The counter is powered by +5V and GND. The input signals are YDOPIN\_L, XI\_H, WINDOW, YDOP\_L, CCP\_OUT, YCPOUT, YMUTE\_L, YWESW\_L, FRI, and BLKON\_L. The counter is connected to a 4-bit display (P8101 VJP3090) and a 4-bit LED display (P8102 VJP3090). The circuit includes various resistors (R8153, R8154, R8155, R8156, R8435), capacitors (C8150, C8151), and a diode (D8401).

Ref No.



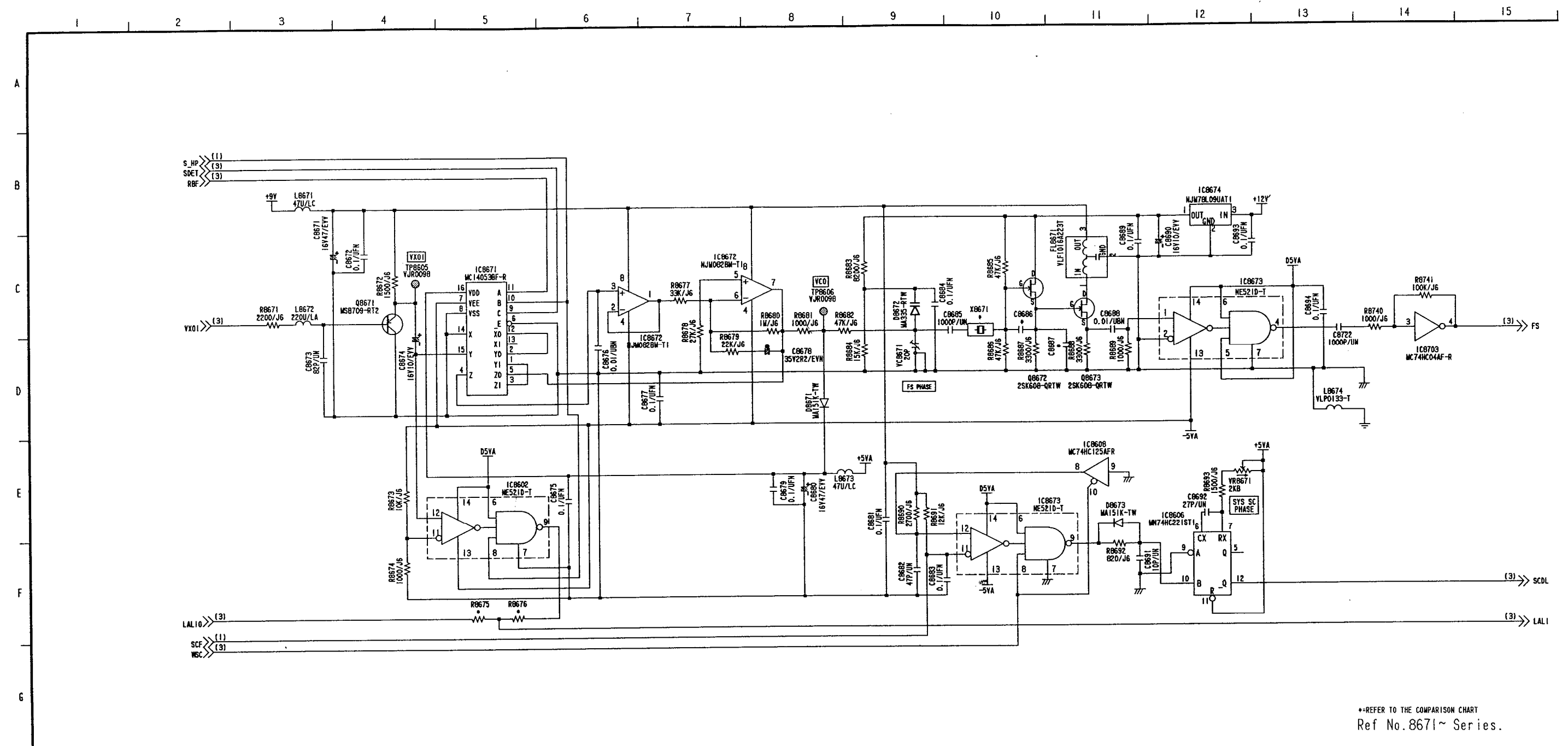


Ref No.8000 Series.



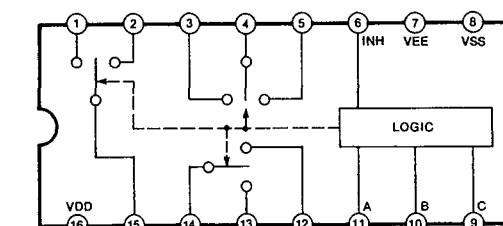
SCM-65





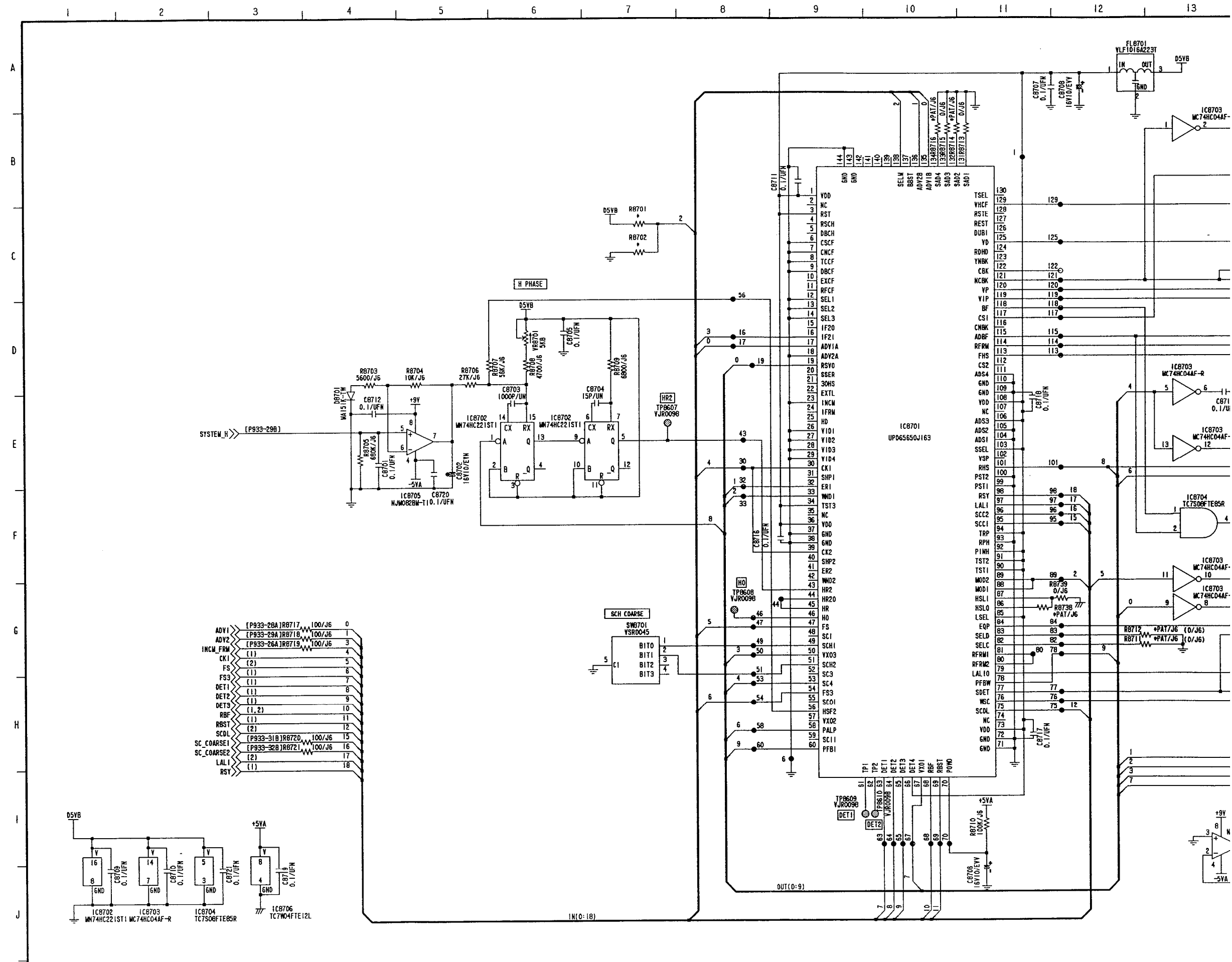
\*REFER TO THE COMPARISON CHART  
Ref No.8671~ Series.

IC8671  
MC14053BF-R

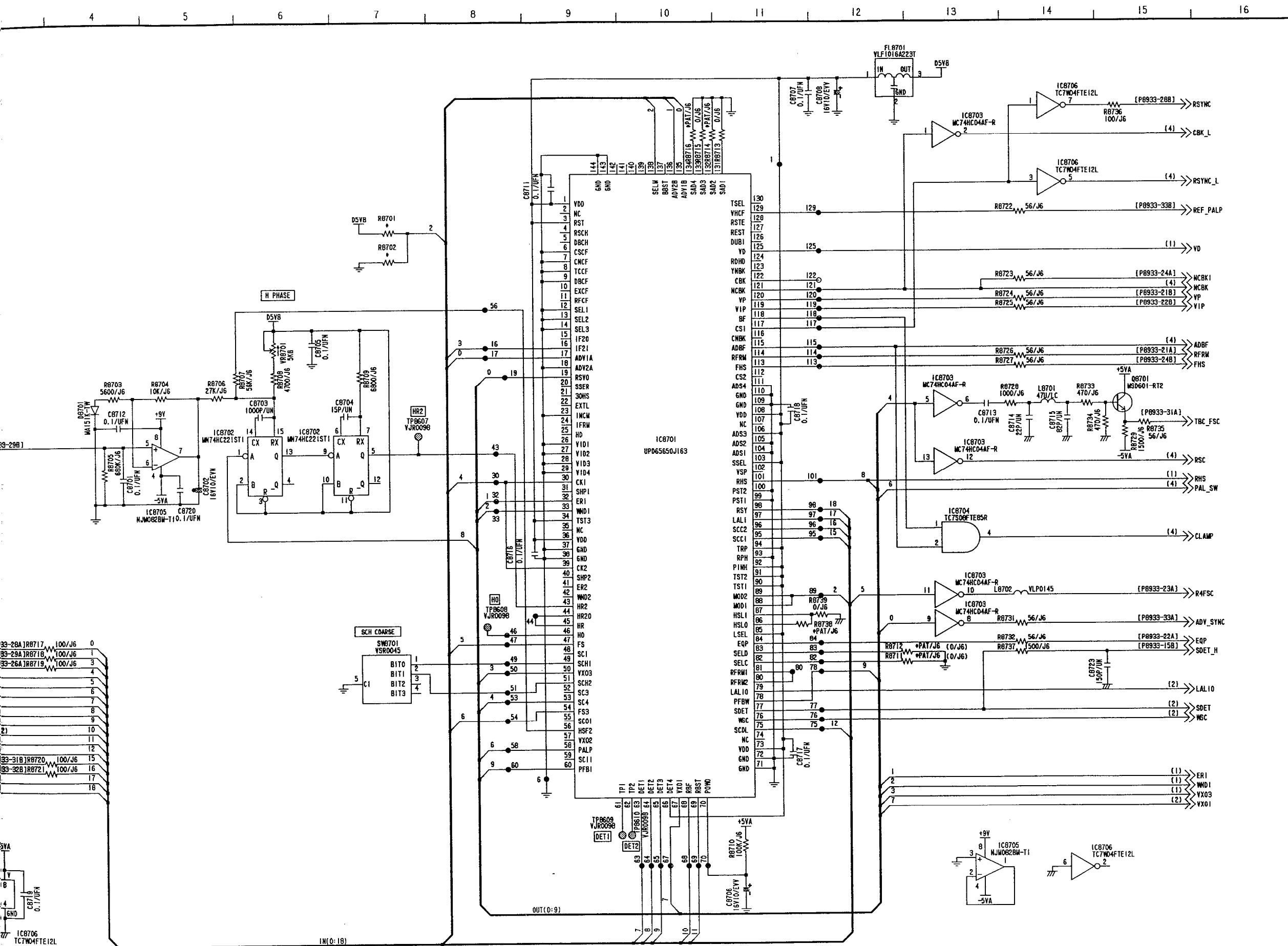




# SYNC GEN-3 SCHEMATIC DIAGRAM (E12: Page CBA-10) 3/6



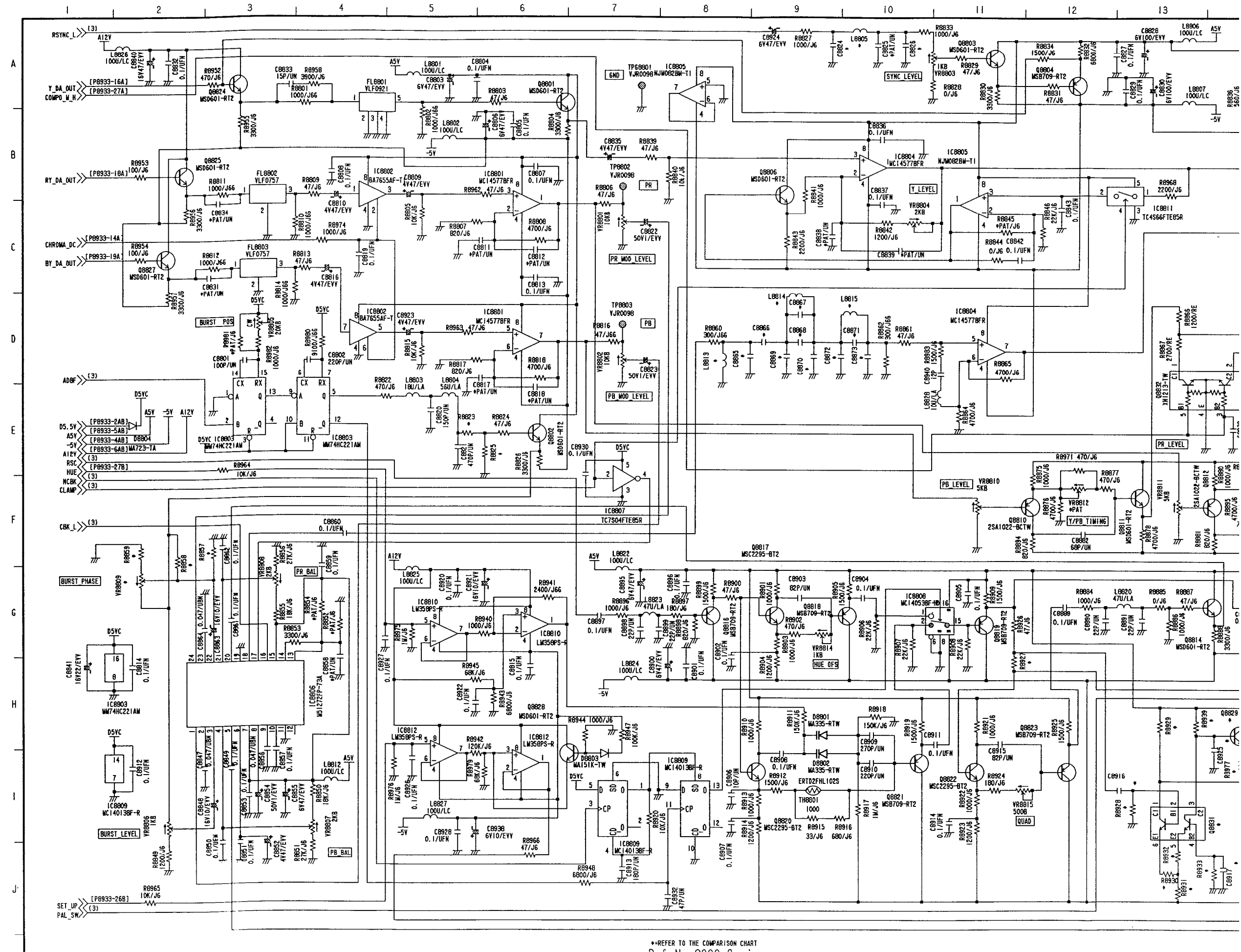




\*REFER TO THE COMPARISON CHART  
Ref No.8701~ Series.

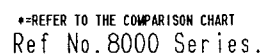


# ENCODER SCHEMATIC DIAGRAM (E12: Page CBA-10) 4/6



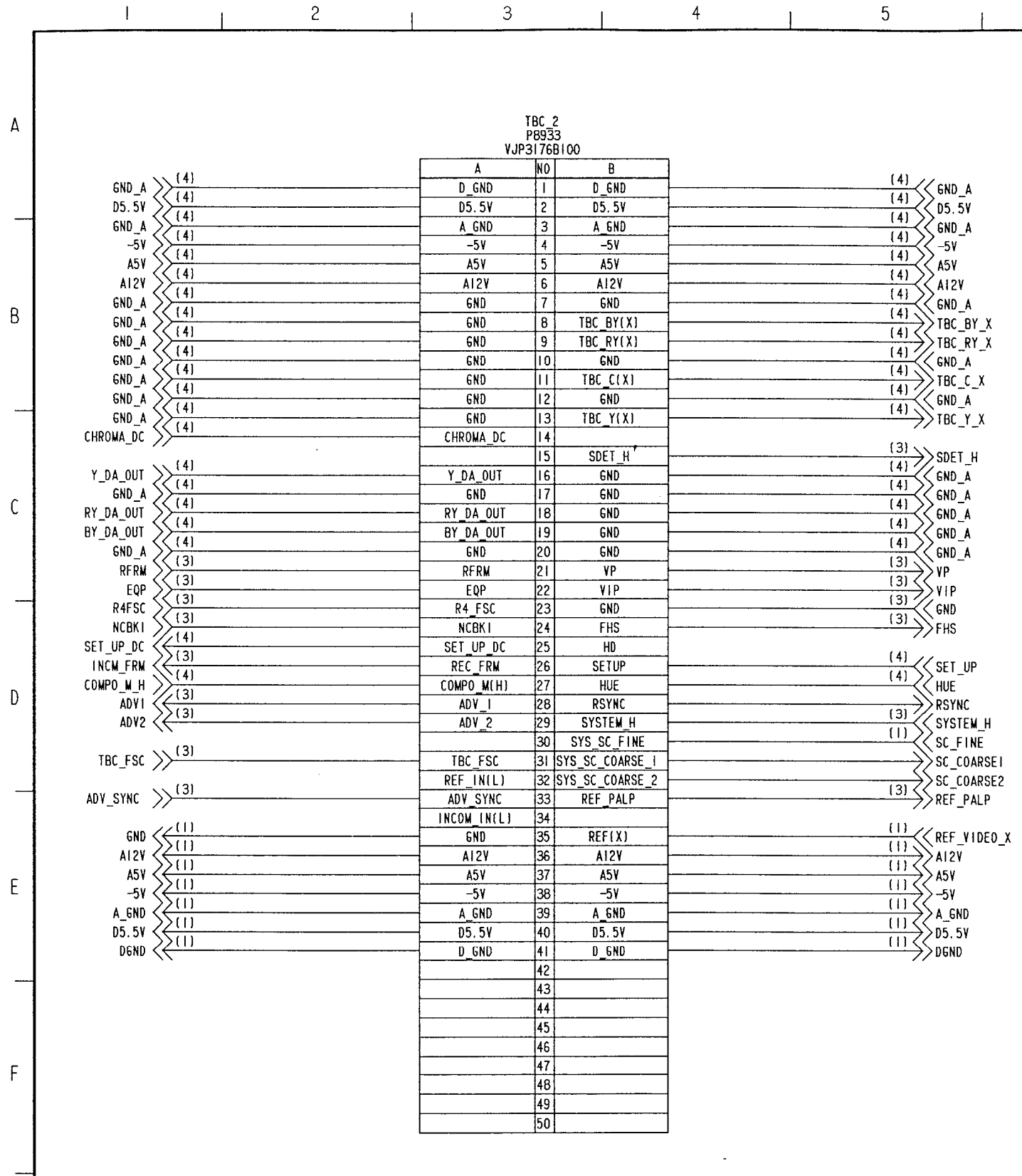
•REFER TO THE COMPARISON CHART  
Ref No.8000 Series.







TBC (2) CONNECTION SCHEMATIC DIAGRAM (E12: Page CBA-10) 5/6



TBC (2) COMPARISON CHART (E12: Page CBA-10) 6/6

\$REF\$	NTSC	PAL	ON
C8626	15P/UN	*PAT/UN	15P/UN
C8627	15P/UN	*PAT/UN	15P/UN
C8646	*PAT/UFN	0.1/UFN	0.1/UFN
C8647	*PAT/UFN	0.1/UFN	0.1/UFN
C8648	*PAT/EVV	16V47/EVV	16V47/EVV
C8649	*PAT/UBN	0.01/UBN	0.01/UBN
C8650	*PAT/UFN	0.1/UFN	0.1/UFN
C8651	*PAT/EVN	35V2R2/EVN	35V2R2/EVN
C8652	*PAT/UN	1000P/UN	1000P/UN
C8653	*PAT/UFN	0.1/UFN	0.1/UFN
C8654	*PAT/EVV	16V47/EVV	16V47/EVV
C8655	*PAT/UN	220P/UN	220P/UN
C8661	*PAT/UFN	0.1/UFN	0.1/UFN
C8686	47P/UN	18P/UN	47P/UN
C8687	47P/UN	22P/UN	47P/UN
C8811	*PAT/UN	*PAT/UN	12P/UN
C8812	*PAT/UN	*PAT/UN	12P/UN
C8817	*PAT/UN	*PAT/UN	12P/UN
C8818	*PAT/UN	*PAT/UN	12P/UN
C8824	18P/UN	33P/UN	18P/UN
C8825	*PAT/UN	*PAT/UN	12P/UN
C8826	100P/UN	220P/UN	100P/UN
C8831	*PAT/UN	*PAT/UN	12P/UN
C8834	*PAT/UN	*PAT/UN	12P/UN
C8838	*PAT/UN	*PAT/UN	12P/UN
C8839	*PAT/UN	*PAT/UN	12P/UN
C8858	*PAT/UN	*PAT/UN	12P/UN
C8865	33P/UN	27P/UN	33P/UN
C8866	270P/UN	220P/UN	270P/UN
C8867	68P/UN	27P/UN	68P/UN
C8868	7P/UN	*PAT/UN	7P/UN
C8869	22P/UN	*PAT/UN	22P/UN
C8870	120P/UN	100P/UN	120P/UN
C8871	10P/UN	47P/UN	10P/UN
C8872	*PAT/UN	10P/UN	10P/UN
C8873	*PAT/UN	33P/UN	33P/UN
C8916	*PAT/UFN	0.1/UFN	0.1/UFN
C8917	*PAT/UFN	0.1/UFN	0.1/UFN
C8918	*PAT/UFN	0.1/UFN	0.1/UFN
C8919	*PAT/UFN	0.1/UFN	0.1/UFN
C8925	*PAT/UN	10P/UN	10P/UN
D8602	*PAT	MA151K-TW	MA151K-TW
IC8610	*PAT	NJM082BM-T1	NJM082BM-T1
L8603	68U/LA	39U/LA	68U/LA
L8613	*PAT/LC	47U/LC	47U/LC

\$REF\$	NTSC	PAL
L8614	*PAT/LC	47U/LC
L8615	*PAT	VLP0133-T
L8805	47U/LA	100U/LA
L8813	27U/LA	15U/LA
L8814	68U/LA	58U/LA
L8815	58U/LA	68U/LA
Q8826	*PAT	MSB709-RT2
Q8829	*PAT	MSC2295-BT2
Q8830	*PAT	MSC2295-BT2
Q8831	*PAT	XN6534-TW
R8625	82K/J6	47K/J6
R8626	10K/J6	15K/J6
R8627	*PAT/J6	8200/J6
R8628	15K/J6	10K/J6
R8629	*PAT/J6	10K/J6
R8632	*PAT/J6	470/J6
R8633	*PAT/J6	47K/J6
R8634	*PAT/J6	1000/J6
R8635	47K/J6	*PAT/J6
R8636	*PAT/J6	22K/J6
R8637	*PAT/J6	1M/J6
R8675	0/J6	*PAT/J6
R8676	*PAT/J6	0/J6
R8701	*PAT/J6	0/J6
R8702	0/J6	*PAT/J6
R8711	*PAT/J6	*PAT/J6
R8712	*PAT/J6	*PAT/J6
R8714	*PAT/J6	*PAT/J6
R8716	*PAT/J6	*PAT/J6
R8738	*PAT/J6	*PAT/J6
R8823	220/J6	270/J6
R8825	270/J6	220/J6
R8845	*PAT/J6	*PAT/J6
R8852	*PAT/J6	*PAT/J6
R8854	*PAT/J6	*PAT/J6
R8857	0/J6	*PAT/J6
R8858	*PAT/J6	*PAT/J6
R8859	*PAT/J6	4700/J6
R8927	0/J6	*PAT/J6
R8928	*PAT/J6	10K/J6
R8929	*PAT/J6	390/J6
R8930	*PAT/J6	180/J6
R8931	*PAT/J6	330/J6
R8932	*PAT/J6	180/J6
R8933	*PAT/J6	10K/J6



(4) GND\_A  
(4) D5.5V  
(4) GND\_A  
(4) -5V  
(4) A5V  
(4) A12V  
(4) GND\_A  
(4) TBC\_BY\_X  
(4) TBC\_RY\_X  
(4) GND\_A  
(4) TBC\_C\_X  
(4) GND\_A  
(4) TBC\_Y\_X  
  
(3) SDET\_H  
(4) GND\_A  
(4) GND\_A  
(4) GND\_A  
(4) GND\_A  
(4) GND\_A  
(3) VP  
(3) VIP  
(3) GND  
(3) FHS  
  
(4) SET\_UP  
(4) HUE  
(3) RSYNC  
(1) SYSTEM\_H  
(1) SC\_FINE  
(3) SC\_COARSE1  
(3) SC\_COARSE2  
(3) REF\_PALP  
  
(1) REF\_VIDEO\_X  
(1) A12V  
(1) A5V  
(1) -5V  
(1) A\_GND  
(1) D5.5V  
(1) DGND

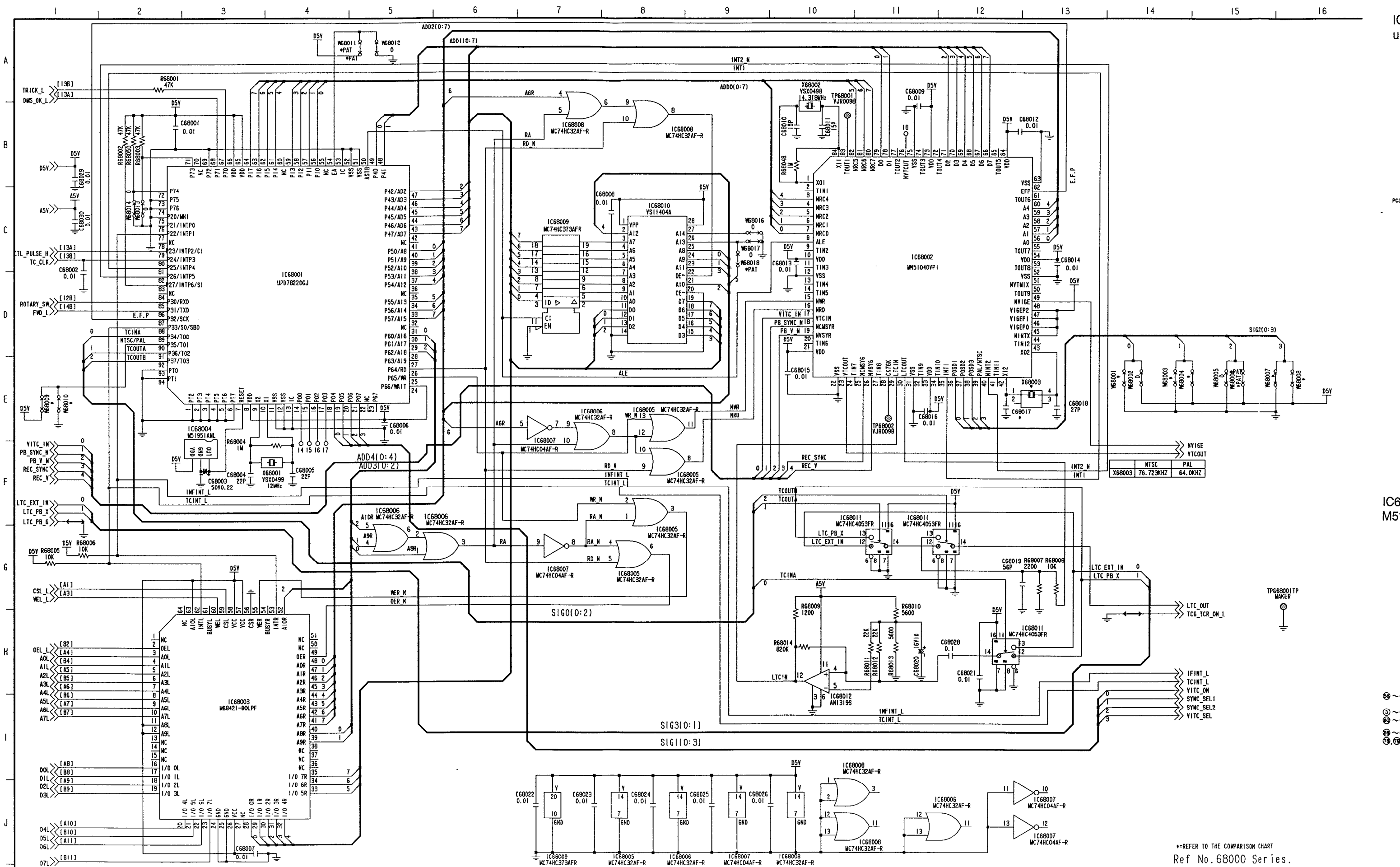
\$REF\$	NTSC	PAL	ON
C8626	15P/UN	*PAT/UN	15P/UN
C8627	15P/UN	*PAT/UN	15P/UN
C8646	*PAT/UFN	0.1/UFN	0.1/UFN
C8647	*PAT/UFN	0.1/UFN	0.1/UFN
C8648	*PAT/EVV	16V47/EVV	16V47/EVV
C8649	*PAT/UBN	0.01/UBN	0.01/UBN
C8650	*PAT/UFN	0.1/UFN	0.1/UFN
C8651	*PAT/EVN	35V2R2/EVN	35V2R2/EVN
C8652	*PAT/UN	1000P/UN	1000P/UN
C8653	*PAT/UFN	0.1/UFN	0.1/UFN
C8654	*PAT/EVV	16V47/EVV	16V47/EVV
C8655	*PAT/UN	220P/UN	220P/UN
C8661	*PAT/UFN	0.1/UFN	0.1/UFN
C8686	47P/UN	18P/UN	47P/UN
C8687	47P/UN	22P/UN	47P/UN
C8811	*PAT/UN	*PAT/UN	12P/UN
C8812	*PAT/UN	*PAT/UN	12P/UN
C8817	*PAT/UN	*PAT/UN	12P/UN
C8818	*PAT/UN	*PAT/UN	12P/UN
C8824	18P/UN	33P/UN	18P/UN
C8825	*PAT/UN	*PAT/UN	12P/UN
C8826	100P/UN	220P/UN	100P/UN
C8831	*PAT/UN	*PAT/UN	12P/UN
C8834	*PAT/UN	*PAT/UN	12P/UN
C8838	*PAT/UN	*PAT/UN	12P/UN
C8839	*PAT/UN	*PAT/UN	12P/UN
C8858	*PAT/UN	*PAT/UN	12P/UN
C8865	33P/UN	27P/UN	33P/UN
C8866	270P/UN	220P/UN	270P/UN
C8867	68P/UN	27P/UN	68P/UN
C8868	7P/UN	*PAT/UN	7P/UN
C8869	22P/UN	*PAT/UN	22P/UN
C8870	120P/UN	100P/UN	120P/UN
C8871	10P/UN	47P/UN	10P/UN
C8872	*PAT/UN	10P/UN	10P/UN
C8873	*PAT/UN	33P/UN	33P/UN
C8916	*PAT/UFN	0.1/UFN	0.1/UFN
C8917	*PAT/UFN	0.1/UFN	0.1/UFN
C8918	*PAT/UFN	0.1/UFN	0.1/UFN
C8919	*PAT/UFN	0.1/UFN	0.1/UFN
C8925	*PAT/UN	10P/UN	10P/UN
D8602	*PAT	MA151K-TW	MA151K-TW
IC8610	*PAT	NJM082BM-T1	NJM082BM-T1
L8603	68U/LA	39U/LA	68U/LA
L8613	*PAT/LC	47U/LC	47U/LC

\$REF\$	NTSC	PAL	ON
L8614	*PAT/LC	47U/LC	47U/LC
L8615	*PAT	VLP0133-T	VLP0133-T
L8805	47U/LA	100U/LA	47U/LA
L8813	27U/LA	15U/LA	27U/LA
L8814	6R8U/LA	5R6U/LA	6R8U/LA
L8815	5R6U/LA	6R8U/LA	5R6U/LA
Q8826	*PAT	MSB709-RT2	MSB709-RT2
Q8829	*PAT	MSC2295-BT2	MSC2295-BT2
Q8830	*PAT	MSC2295-BT2	MSC2295-BT2
Q8831	*PAT	XN6534-TW	XN6534-TW
R8625	82K/J6	47K/J6	82K/J6
R8626	10K/J6	15K/J6	10K/J6
R8627	*PAT/J6	8200/J6	8200/J6
R8628	15K/J6	10K/J6	15K/J6
R8629	*PAT/J6	10K/J6	10K/J6
R8632	*PAT/J6	470/J6	470/J6
R8633	*PAT/J6	47K/J6	47K/J6
R8634	*PAT/J6	1000/J6	1000/J6
R8635	47K/J6	*PAT/J6	47K/J6
R8636	*PAT/J6	22K/J6	22K/J6
R8637	*PAT/J6	1M/J6	1M/J6
R8675	0/J6	*PAT/J6	0/J6
R8676	*PAT/J6	0/J6	0/J6
R8701	*PAT/J6	0/J6	0/J6
R8702	0/J6	*PAT/J6	0/J6
R8711	*PAT/J6	*PAT/J6	0/J6
R8712	*PAT/J6	*PAT/J6	0/J6
R8714	*PAT/J6	*PAT/J6	0/J6
R8716	*PAT/J6	*PAT/J6	0/J6
R8738	*PAT/J6	*PAT/J6	0/J6
R8823	220/J6	270/J6	220/J6
R8825	270/J6	220/J6	270/J6
R8845	*PAT/J6	*PAT/J6	0/J6
R8852	*PAT/J6	*PAT/J6	0/J6
R8854	PAT/J6	PAT/J6	0/J6
R8857	0/J6	PAT/J6	0/J6
R8858	*PAT/J6	*PAT/J6	0/J6
R8859	*PAT/J6	4700/J6	4700/J6
R8927	0/J6	*PAT/J6	0/J6
R8928	*PAT/J6	10K/J6	10K/J6
R8929	*PAT/J6	390/J6	390/J6
R8930	*PAT/J6	180/J6	180/J6
R8931	*PAT/J6	330/J6	330/J6
R8932	*PAT/J6	180/J6	180/J6
R8933	*PAT/J6	10K/J6	10K/J6

\$REF\$	NTSC	PAL	ON
R8934	*PAT/J6	22K/J6	22K/J6
R8935	*PAT/J6	22K/J6	22K/J6
R8936	*PAT/J6	22K/J6	22K/J6
R8937	*PAT/J6	47/J6	47/J6
R8938	*PAT/J6	1500/J6	1500/J6
R8939	*PAT/J6	390/J6	390/J6
R8977	*PAT/J6	5600/J6	5600/J6
R8978	*PAT/J6	5600/J6	5600/J6
R8981	*PAT/J6	*PAT/J6	10K/J6
VC8801	*PAT	20P	ECV12W20X60
VR8604	*PAT	5KB	EVN32CA00B53
VR8809	*PAT	1KB	EVN32CA00B13
VR8812	*PAT	*PAT	EVM7JSW30B13
VR8813	*PAT	*PAT	EVM7JSW30B13
X8601	VSX0338	VSX0270	VSX0338
X8602	*PAT	VSX0567	VSX0567
X8671	VSX0081	VSX0114	VSX0081



## TIME CODE-1 SCHEMATIC DIAGRAM (E10: Page CBA-13) 1/3





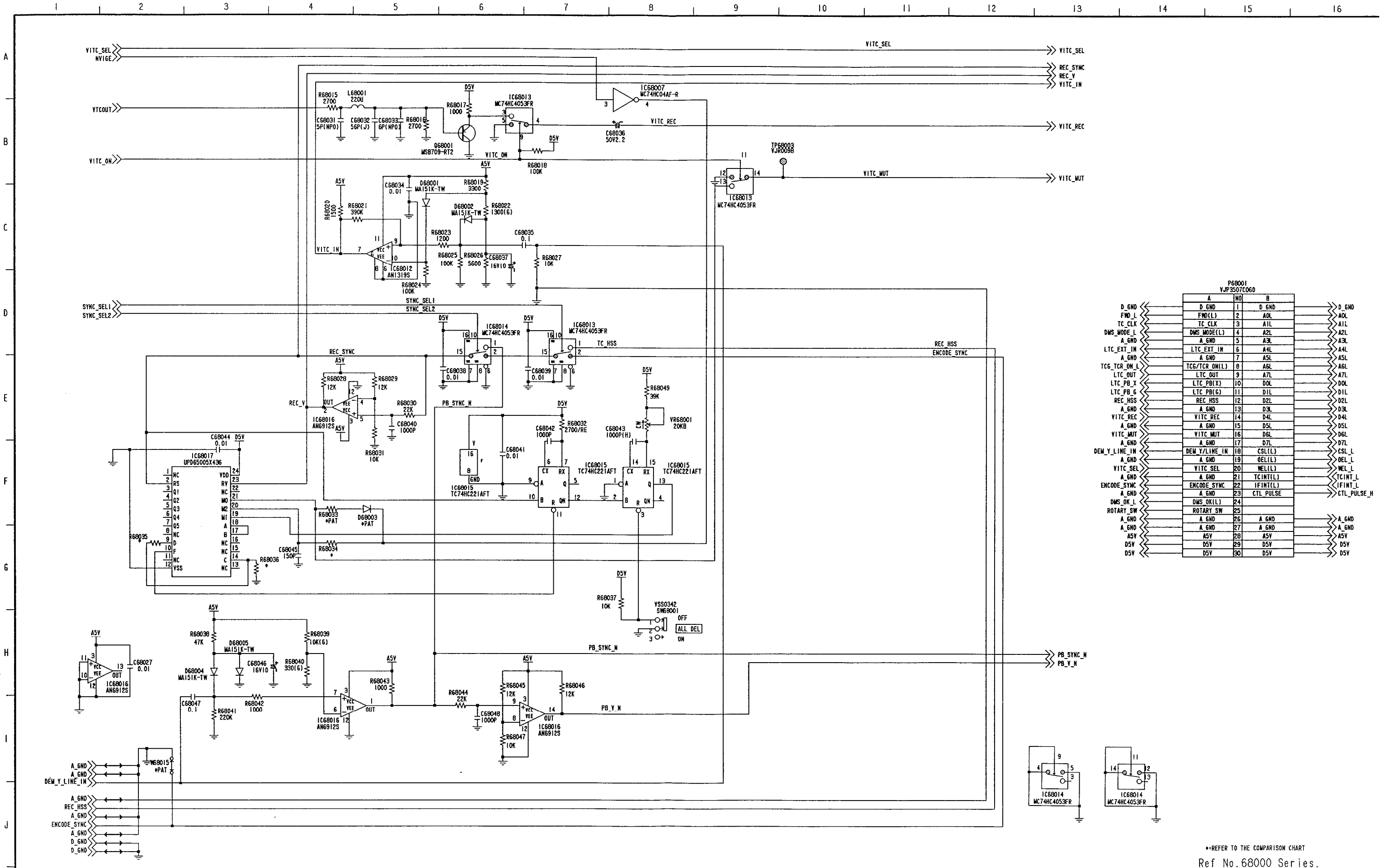
The diagram illustrates the internal architecture of the 80C86 microprocessor. Key components include:

- Control and Status Signals (Left):** X1, X'2, PC0/T1, PC1/R2, PC2/SCK, NM, INT1, PC3/INT2/T1, PC4/T0, PC5/C1, PC6/C00, PC7/C01, AM7-0, VABE, AVPU, AVS.
- Internal Processor Blocks:**
  - LATCH INC/DEC PC SP EA:** Registers for instruction pointer, stack pointer, and instruction execution address.
  - MAIN G.R. (Y, A, B, C, D, E, H, L):** General registers for data manipulation.
  - ALT. G.R. (V, A\*, B\*, C\*, D\*, E\*, H\*, L\*):** Alternate general registers.
  - DATA MEMORY (256-BYTE):** On-chip data memory.
  - ALU (8/16):** Arithmetic Logic Unit for processing data.
  - INST. REC. (INSTR. REGISTER) and INST. DECODER:** For instruction reception and decoding.
- Ports (Right):** PORT A, PORT B, PORT C, PORT D, PORT F, and PORT E (labeled PF7-0/AB15-8, PD7-0/AD7-0, PC7-0, PB7-0, PA7-0).
- Internal Data Bus:** Connects the various internal blocks.
- Control and Status Signals (Bottom):** RD, WR, ALE, MODE2, RESET, STP, VDD, VSS.

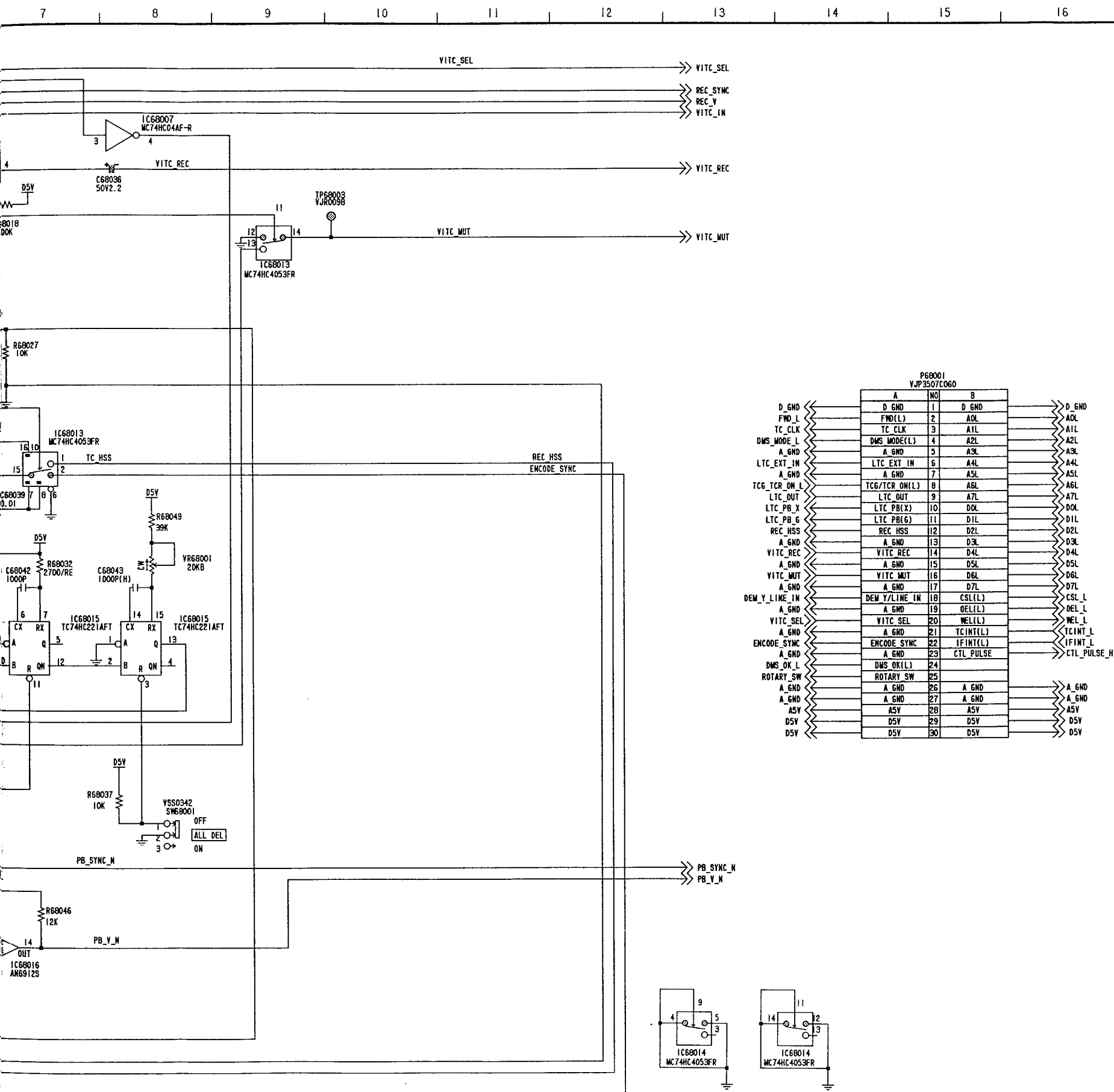
[illegible]



TIME CODE-2 SCHEMATIC DIAGRAM (E10: Page CBA-13) 2/3







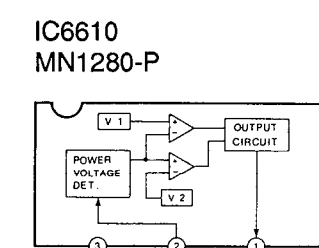
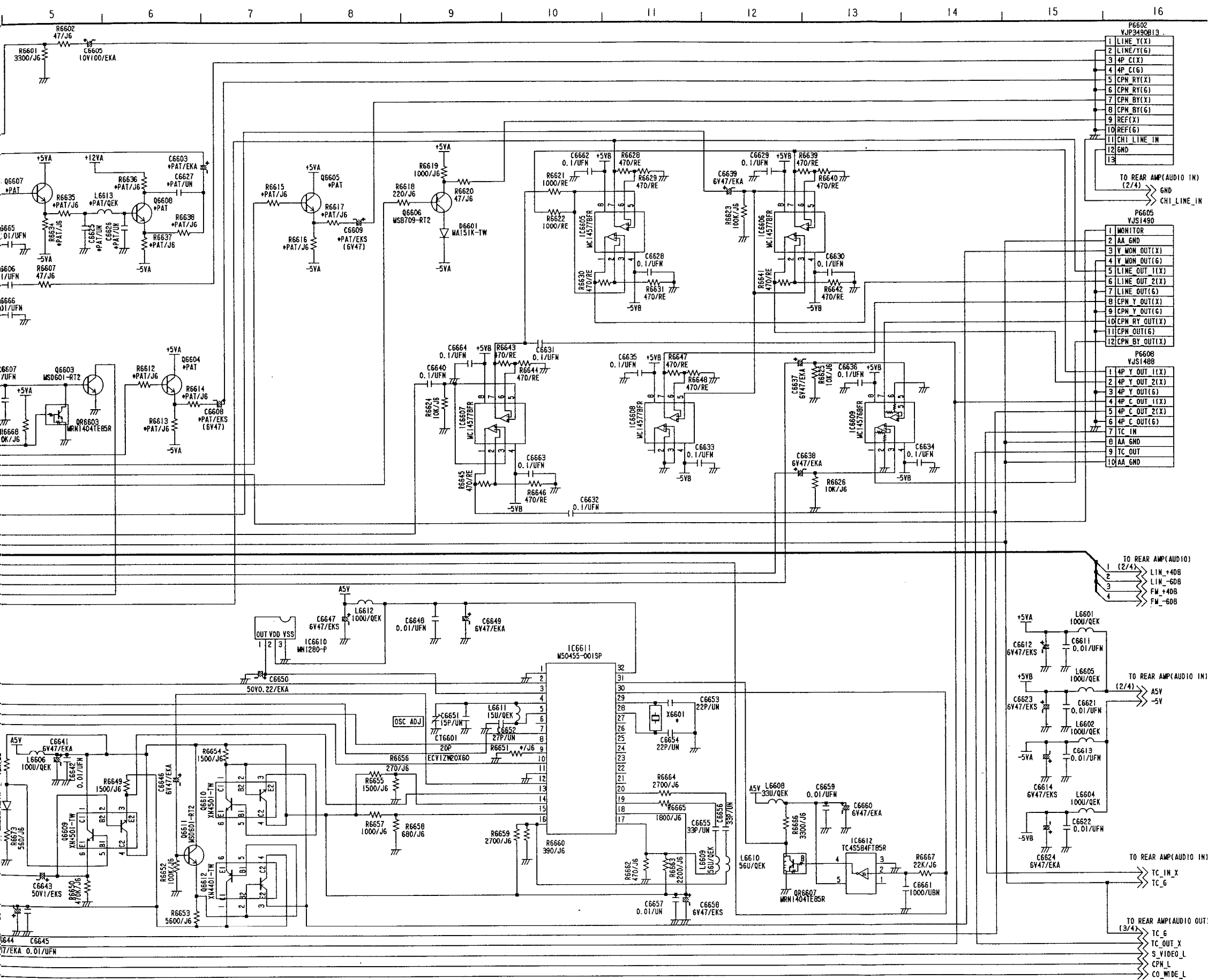
\$REF\$	NTSC	PAL	ON
C68017	18P/UN	22P/UN	18P/UN
D68003	*PAT	*PAT	MA151K-TW
R68033	*PAT/J6	*PAT/J6	10K/J6
R68034	15K/RE	18K/RE	15K/RE
R68035	*PAT/J6	10K/J6	10K/J6
R68036	10K/J6	*PAT/J6	10K/J6
W68001	0/J6	*PAT/J6	0/J6
W68002	*PAT/J6	0/J6	0/J6
W68003	0/J6	*PAT/J6	0/J6
W68004	*PAT/J6	0/J6	0/J6
W68006	*PAT/J6	*PAT/J6	0/J6
W68007	0/J6	*PAT/J6	0/J6
W68008	*PAT/J6	0/J6	0/J6
W68009	0/J6	*PAT/J6	0/J6
W68010	*PAT/J6	0/J6	0/J6
W68011	*PAT/J6	*PAT/J6	0/J6
W68015	*PAT/J6	*PAT/J6	0/J6
W68018	*PAT/J6	*PAT/J6	0/J6
X68003	VSX0614-T	VSX0615-T	VSX0614-T

••REFER TO THE COMPARISON CHART  
Ref No.68000 Series.











The diagram illustrates a video amplifier circuit, organized into a grid with letters A-H and numbers 1-9. The circuit includes a connector block for video signals (FROM AUDIO P4006 VJP3490B13) and a complex network of amplifiers and output drivers.

**Connector Block (FROM AUDIO P4006 VJP3490B13):**

TC_OUT(X)	1
TC_OUT(G)	2
S_VIDEO(L)	3
CPN(L)	4
CO_WIDE(L)	5
CHI_LIN_AMP_OUT	6
AA_GND	7
CH2_LIN_AMP_OUT	8
AA_GND	9
CHI_FM_AMP_OUT	10
AA_GND	11
CH2_FM_AMP_OUT	12
AA_GND	13

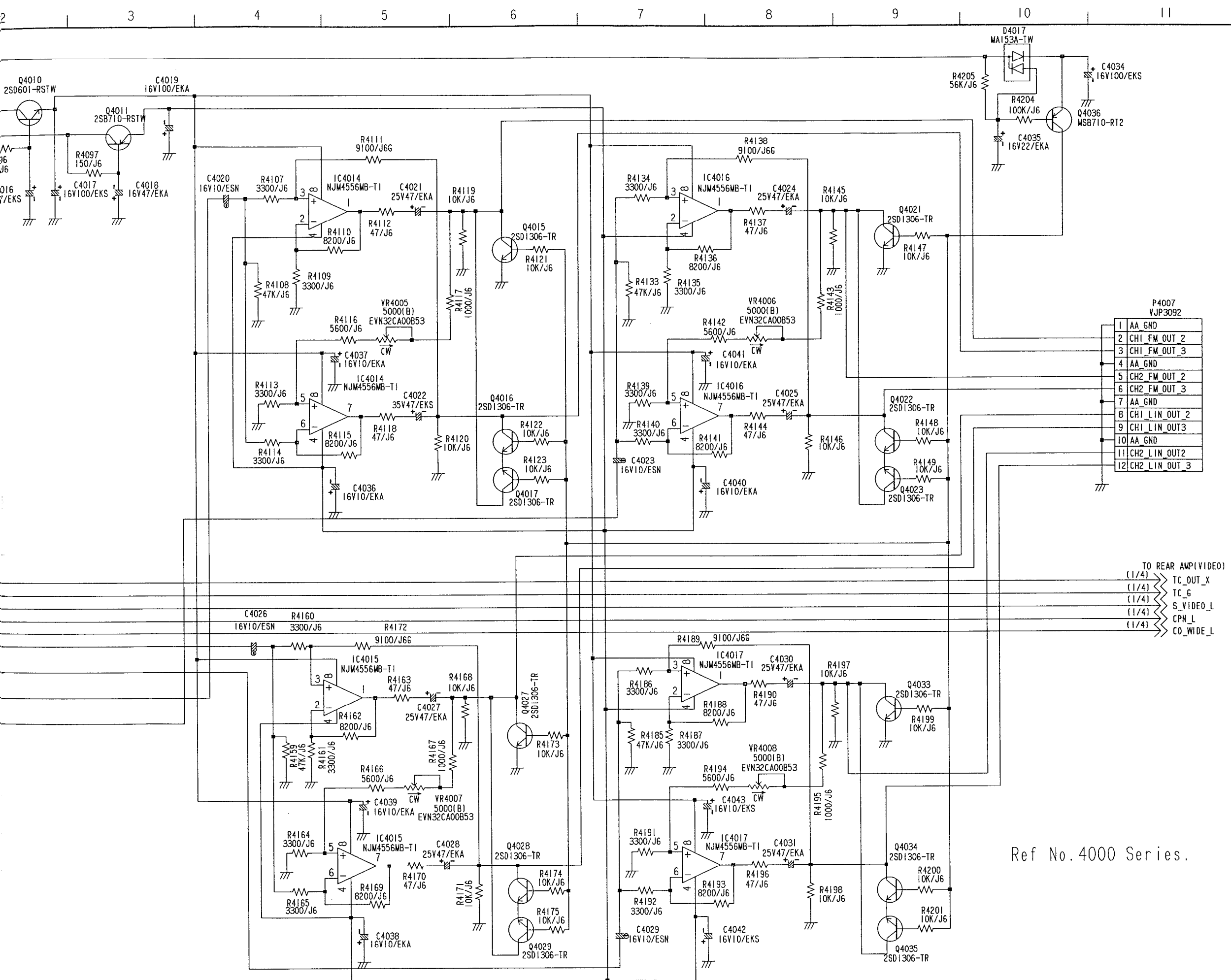
**Key Components and Stages:**

- Input Stage (A1):** Features transistors Q4010 (2SD601-RSTW) and Q4011 (2SB710-RSTW) with resistors R4096, R4097, R4016, R4017, and capacitors C4019, C4018.
- First Amplifier Stage (A2):** Uses IC4014 (NJM4556MB-T1) with resistors R4107, R4110, R4112, R4108, R4109, R4116, R4113, R4114, R4115, and capacitors C4020, C4021, C4037, C4022, C4036.
- Second Amplifier Stage (A3):** Uses IC4016 (NJM4556MB-T1) with resistors R4134, R4136, R4135, R4133, R4142, R4139, R4140, R4141, and capacitors C4024, C4025, C4041, C4023, C4040.
- Output Stage (A4):** Features transistors Q4021, Q4022, Q4023, Q4027, Q4028, Q4033, Q4034, Q4035, and Q4015, Q4016, Q4017, Q4018, Q4019, Q4020, Q4021, Q4022, Q4023, Q4027, Q4028, Q4033, Q4034, Q4035.

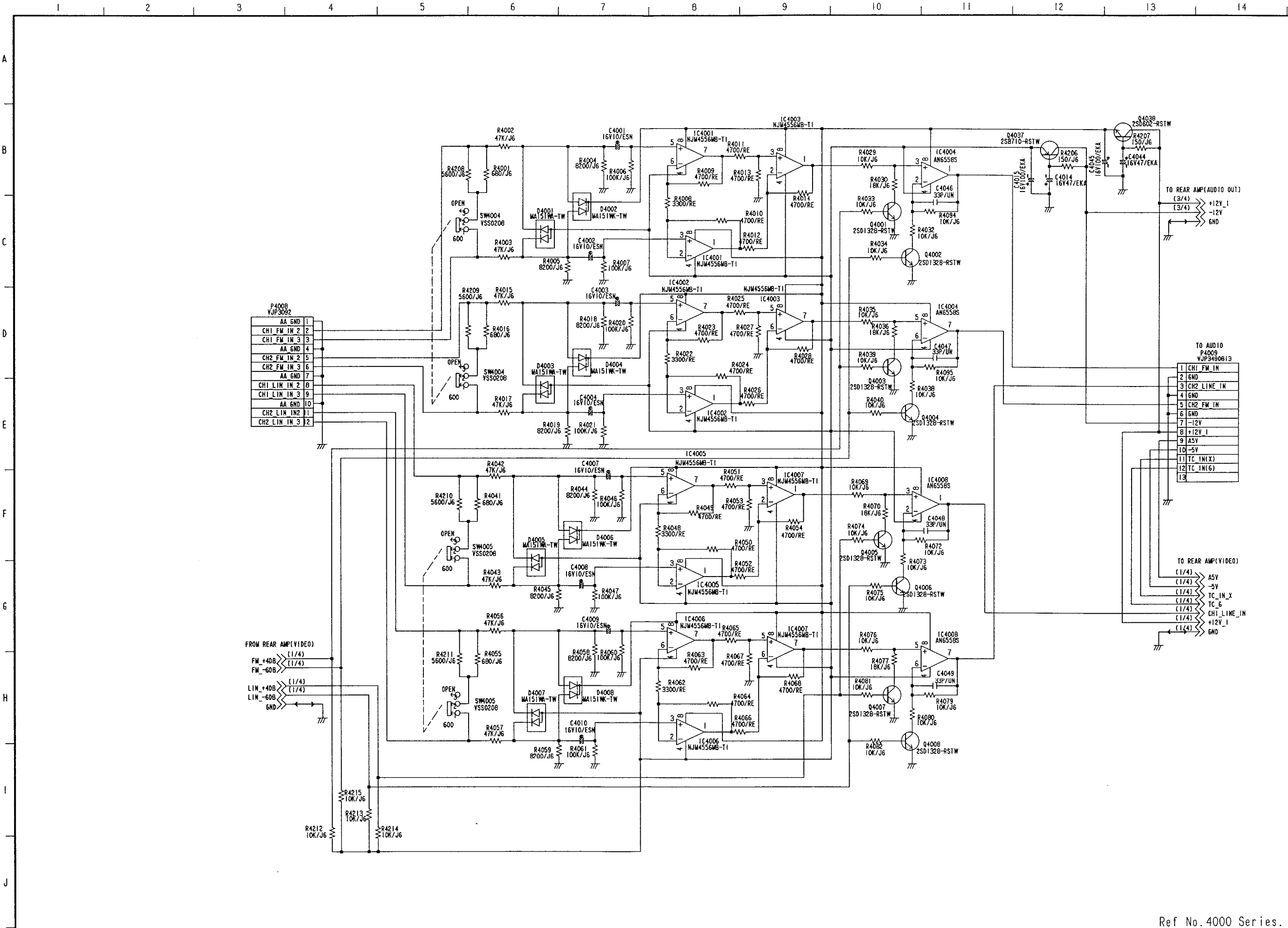
The circuit is powered by a +12V and -12V supply, with various resistors (R4096, R4097, R4016, R4017, R4107, R4110, R4112, R4108, R4109, R4116, R4113, R4114, R4115, R4134, R4136, R4135, R4133, R4142, R4139, R4140, R4141, R4160, R4172, R4163, R4168, R4166, R4167, R4164, R4165, R4189, R4186, R4187, R4188, R4194, R4191, R4192, R4193, R4196, R4197, R4198, R4199, R4200, R4201) and capacitors (C4019, C4018, C4020, C4021, C4037, C4022, C4036, C4024, C4025, C4041, C4023, C4040, C4026, C4027, C4028, C4038, C4030, C4031, C4032, C4033, C4034, C4035) used throughout.



# OUT SCHEMATIC DIAGRAM (E28: Page CBA-16) 3/4





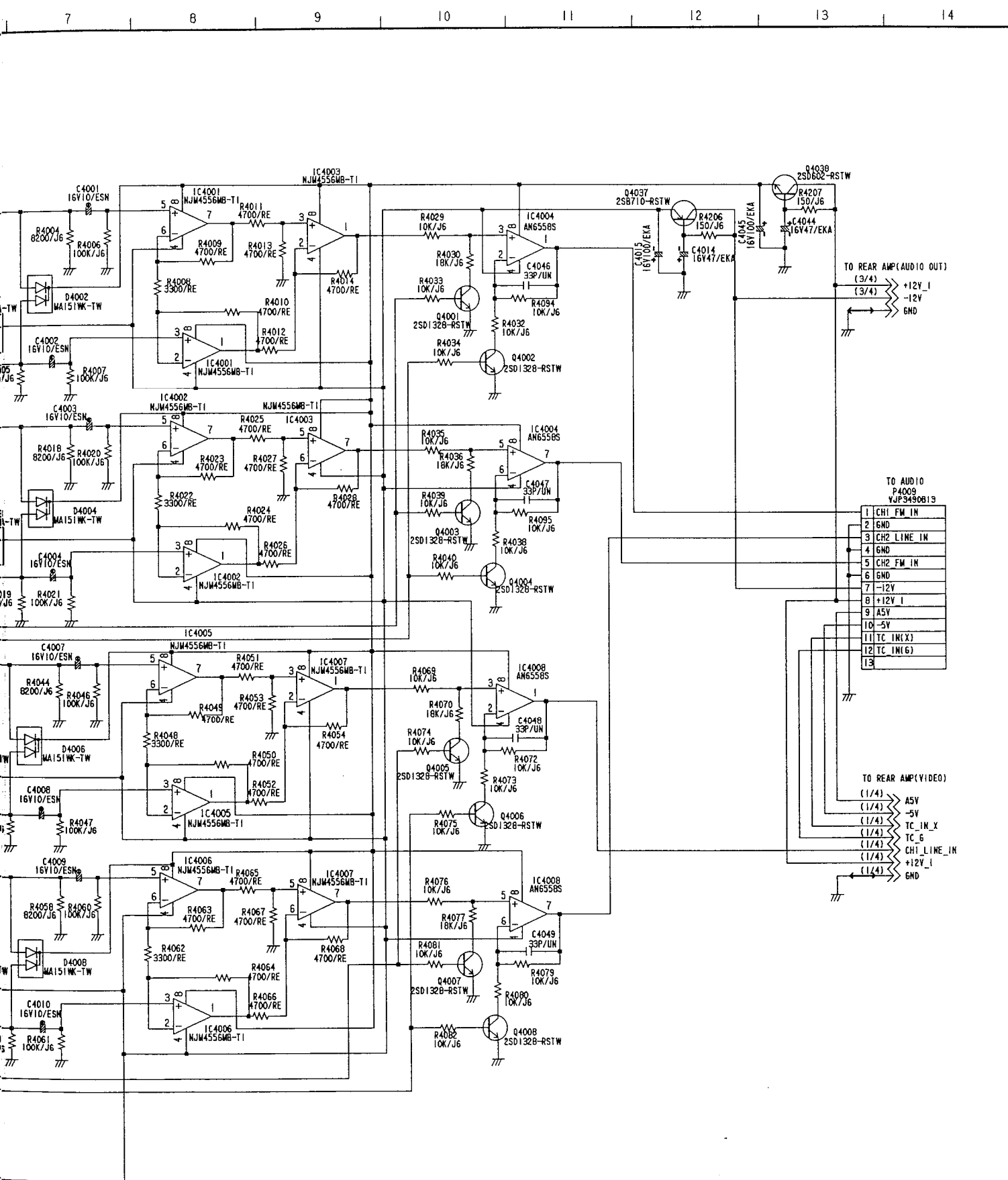


9PIN CONN

A

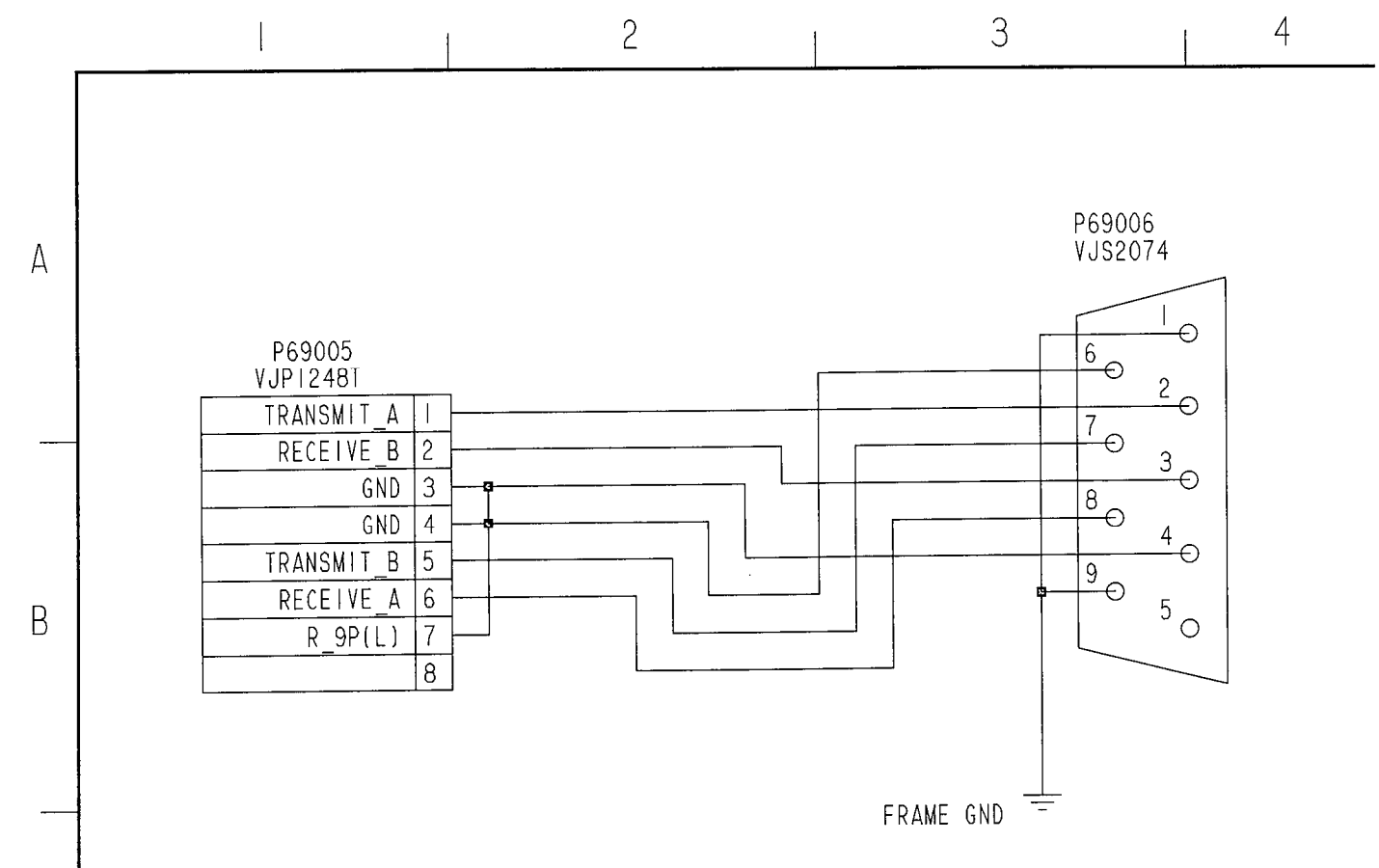
B





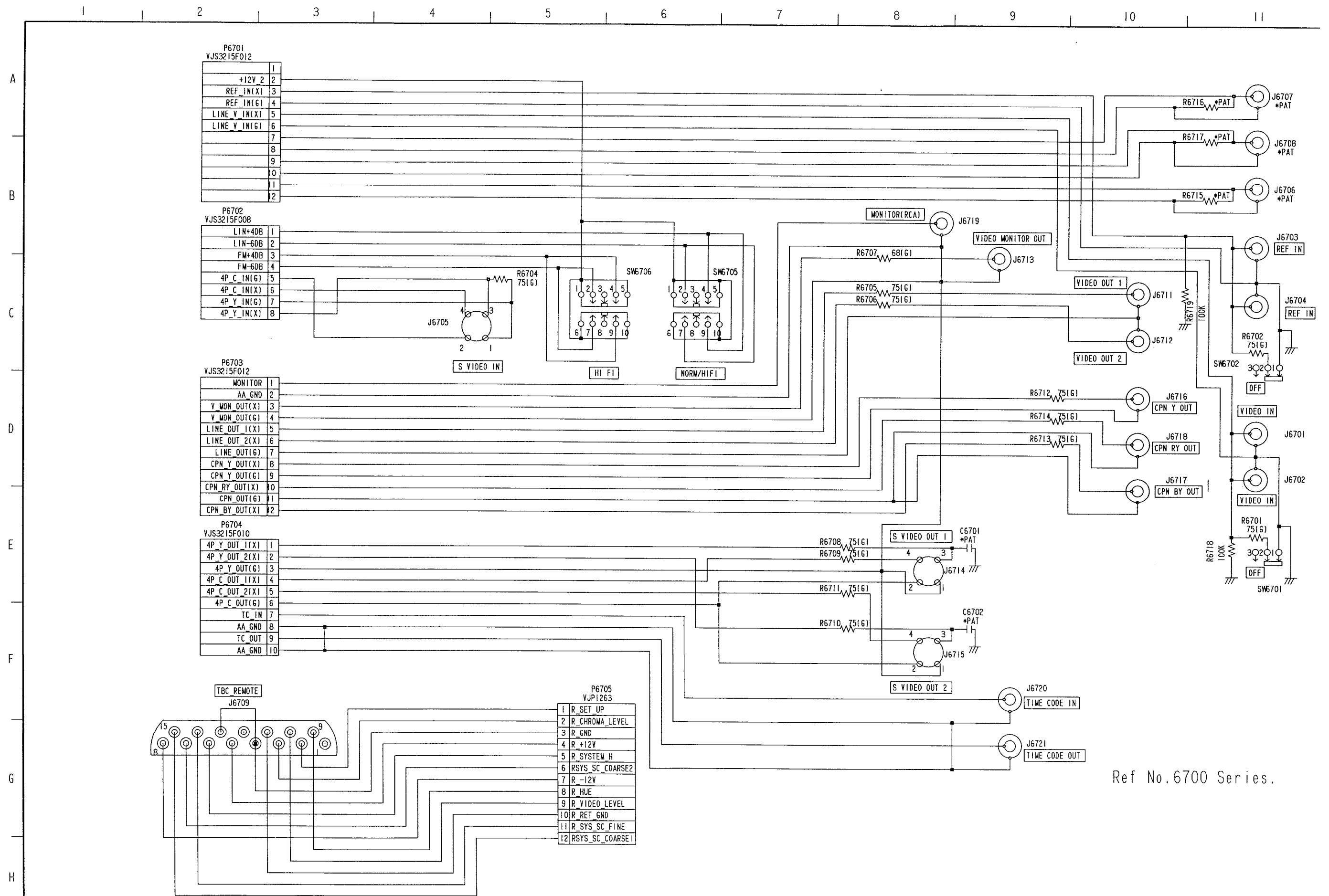
\$REF\$	NTSC	PAL	ON
C6603	*PAT/EKS	*PAT/EKS	6V47/EKS
C6608	*PAT/EKS	*PAT/EKS	6V47/EKS
C6609	*PAT/EKS	*PAT/EKS	6V47/EKS
C6625	*PAT/UN	*PAT/UN	12P/UN
C6626	*PAT/UN	*PAT/UN	33P/UN
C6627	*PAT/UN	*PAT/UN	68P/UN
L6613	*PAT/QEK	*PAT/QEK	33U/QEK
Q6604	*PAT	*PAT	MSD601-RT2
Q6605	*PAT	*PAT	MSD601-RT2
Q6607	*PAT	*PAT	MSD601-RT2
Q6608	*PAT	*PAT	MSD601-RT2
QR6601	*PAT	*PAT	MRN2404TE85R
R6603	*PAT/J6	*PAT/J6	10K/J6
R6612	*PAT/J6	*PAT/J6	220/J6
R6613	*PAT/J6	*PAT/J6	1000/J6
R6614	*PAT/J6	*PAT/J6	47/J6
R6615	*PAT/J6	*PAT/J6	220/J6
R6616	*PAT/J6	*PAT/J6	1000/J6
R6617	*PAT/J6	*PAT/J6	47/J6
R6634	*PAT/J6	*PAT/J6	1000/J6
R6635	*PAT/J6	*PAT/J6	1000/J6
R6636	*PAT/J6	*PAT/J6	820/J6
R6637	*PAT/J6	*PAT/J6	820/J6
R6638	*PAT/J6	*PAT/J6	1000/J6
R6651	*PAT/J6	0/J6	0/J6
X6601	VSX0197	VSX0316	VSX0197

### 9PIN CONNECT SCHEMATIC DIAGRAM (E33: Page CBA-13)





# REAR JACK SCHEMATIC DIAGRAM (E29: Page CBA-15)

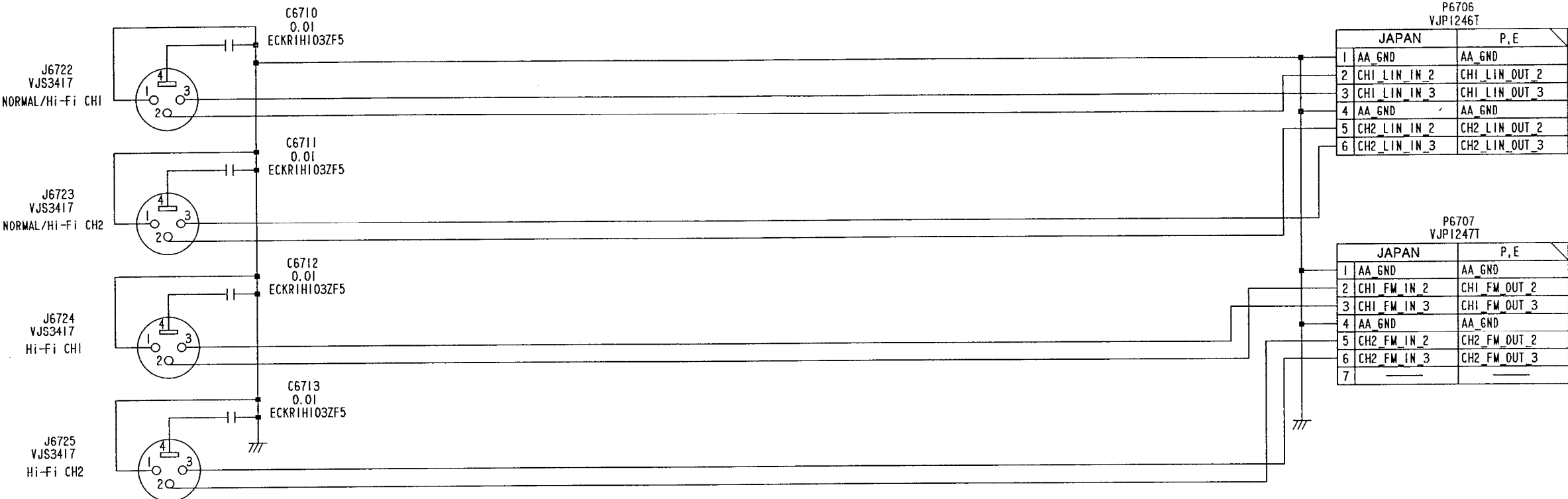


Ref No.6700 Series.

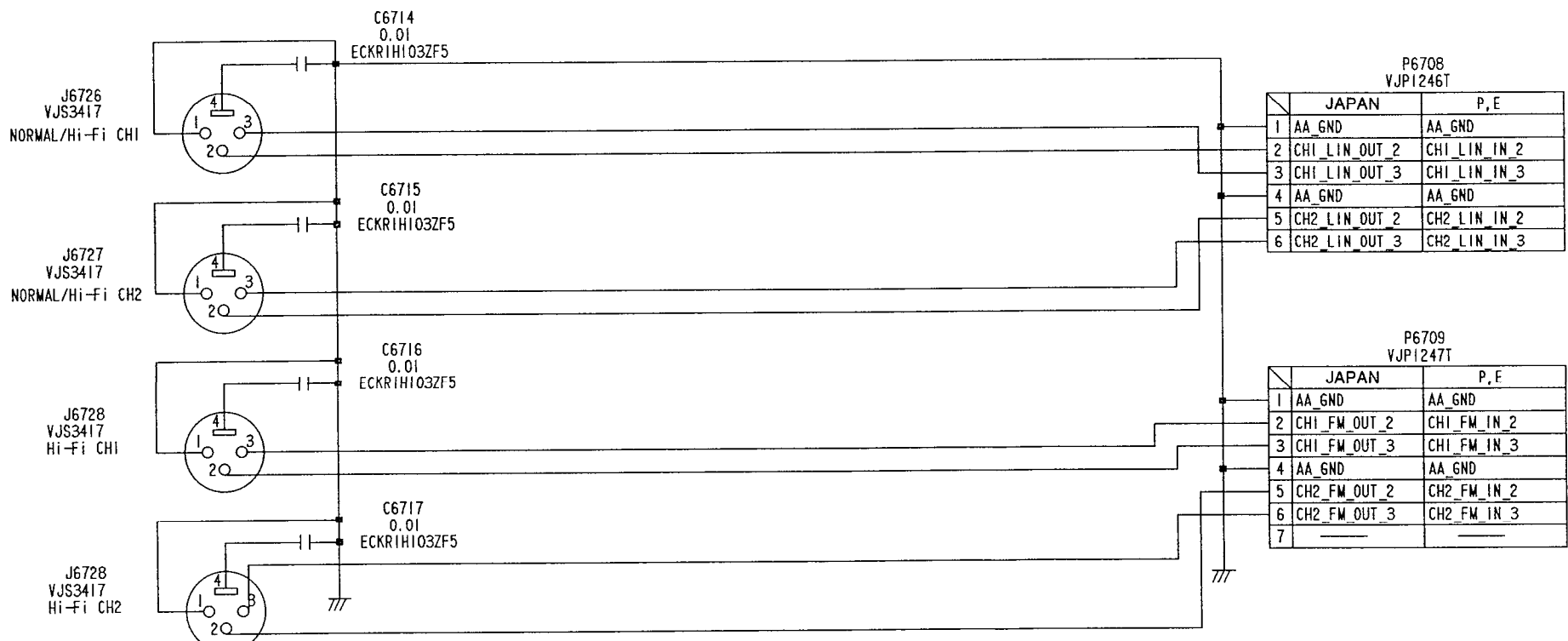


XLR M SCHEMATIC DIAGRAM (E30: Page CBA-18) AND XLR F SCHEMATIC DIAGRAM (E31: Page CBA-18)

XLR M SCHEMATIC DIAGRAM (E30: Page CBA-18)



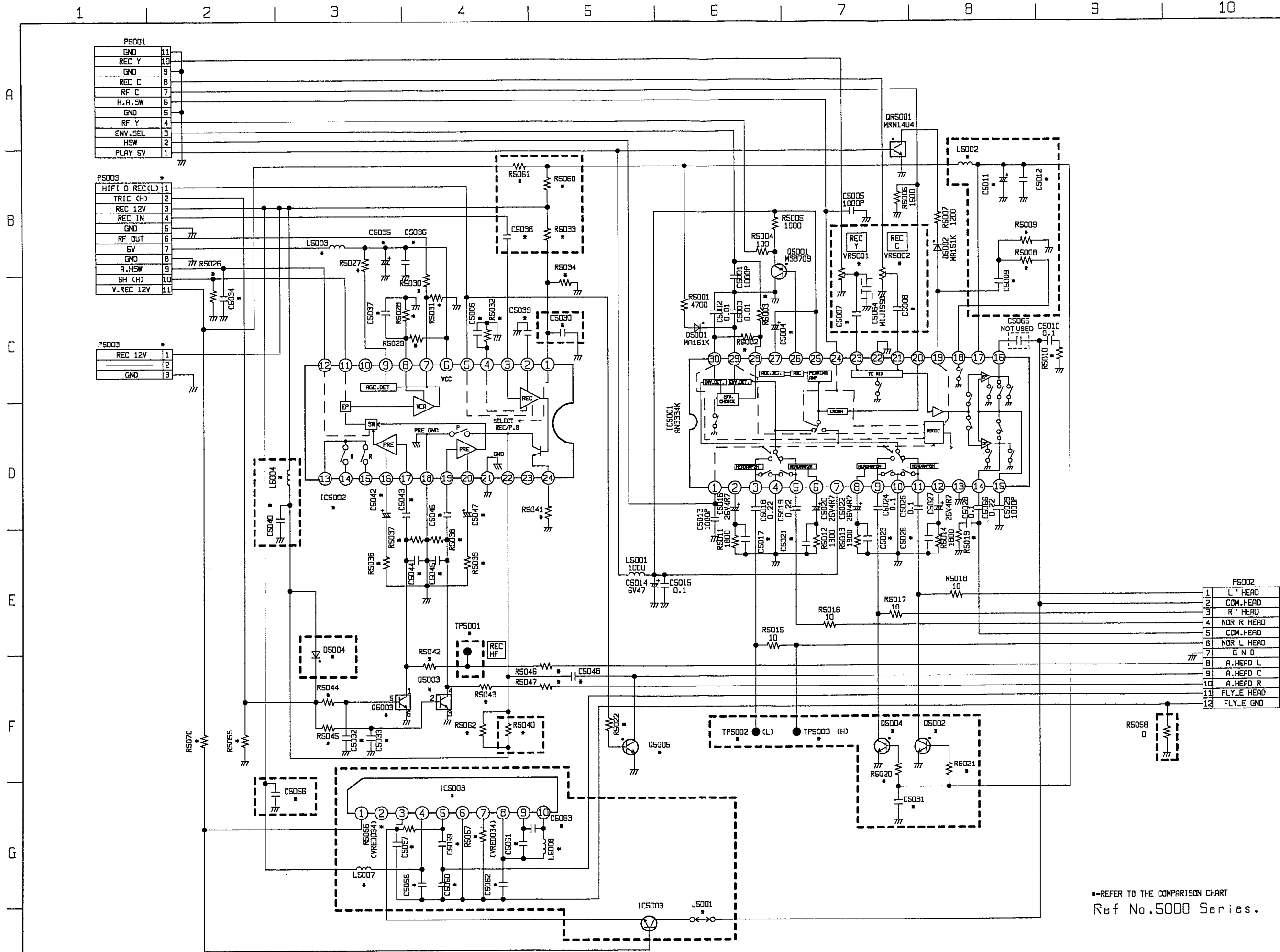
XLR F SCHEMATIC DIAGRAM (E31: Page CBA-18)



Ref No.6700 Series.

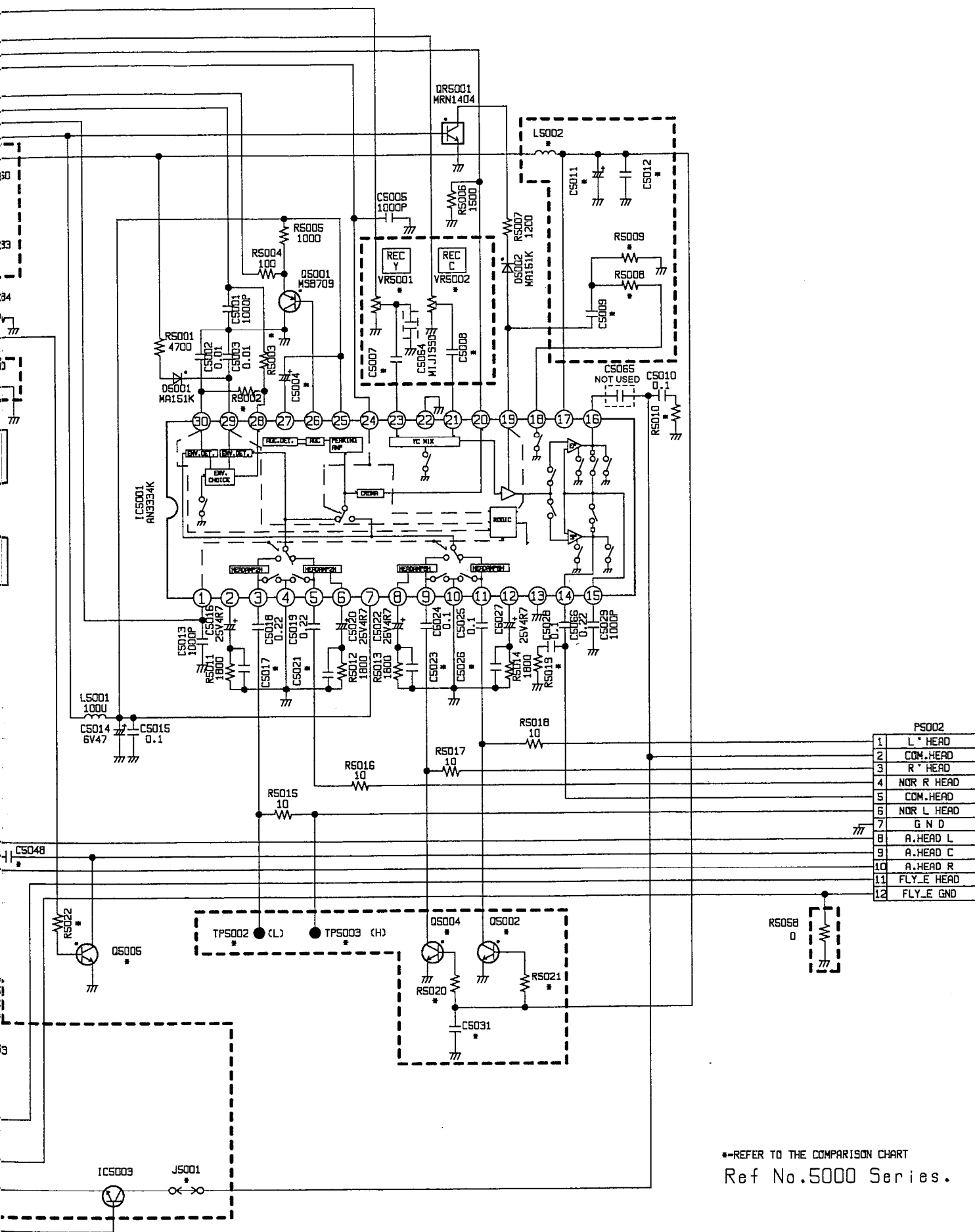


HEAD AMP SCHEMATIC DIAGRAM (E15: Page CBA-17)





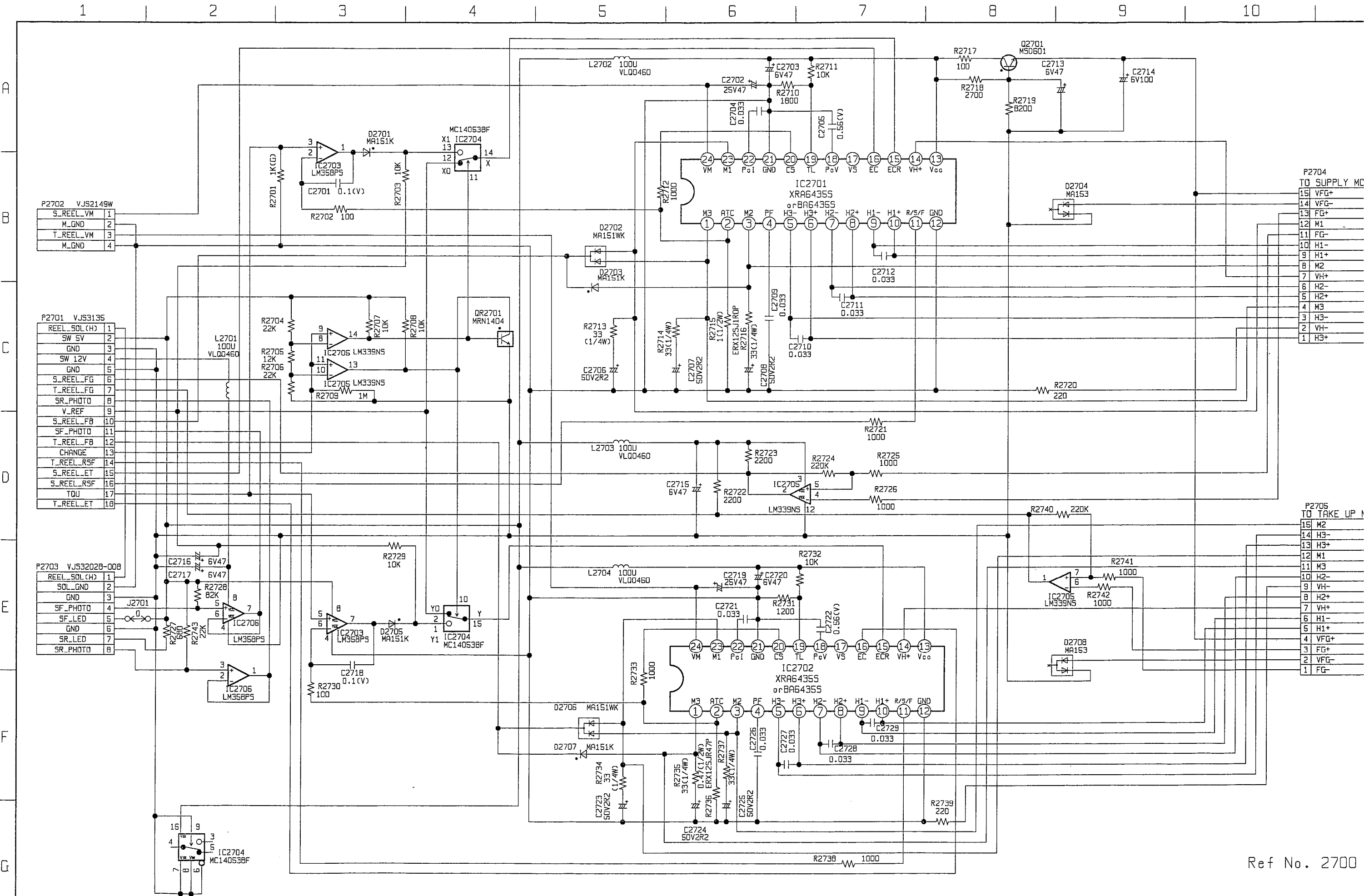
5 6 7 8 9 10



	NTSC	PAL
C5004	50V0.1	50V0.1
C5006	0.01	0.01
C5007	0.01	0.01
C5008	0.01	0.01
C5009	1800P(J) (NPO)	1800P(J) (NPO)
C5011	16V22	16V22
C5012	0.047	0.047
C5017	8P	8P
C5021	8P	8P
C5023	2P	2P
C5026	2P	2P
C5030	0.01	0.01
C5031	0.1	0.1
C5032	0.1	0.1
C5033	0.1	0.1
C5034	1000P(K)	1000P(K)
C5035	6V47	6V47
C5036	0.01	0.01
C5037	0.01(K)	0.01(K)
C5038	0.01(K)	0.01(K)
C5039	0.01	0.01
C5040	0.01	0.01
C5042	50V1	50V1
C5043	470P	470P
C5044	100P	100P
C5045	100P	100P
C5046	470P	470P
C5047	50V1	50V1
C5048	0.0047	0.0047
C5056	0.01	0.01
C5057		
C5058		
C5059		
C5060		
C5061		
C5062		
C5063		
DS004	MA151K-TW	MA151K-TW
IC5002	8A7740FS	8A7740FS
IC5003		
J5001		
LS002	100U	100U
LS003	100U	100U
LS004	100U	100U
LS007		
LS008		
PS003	VJP3091	VJP3091
DS002	25C2295	25C2295
DS003	XN4504-TW	XN4504-TW
DS004	25C2295	25C2295
DS005	25C2295	25C2295
RS002		680K
RS003	0	22K
RS008	2200	
RS009	470	470
RS010	1	1
RS019	390	330
RS020	3300	3300
RS021	3300	3300
RS022	1500	1500
RS026	0	0
RS027	33K	33K
RS028	24K(G)	24K(G)
RS029	27K(G)	27K(G)
RS030	390	390
RS031	10K	10K
RS032	47K	47K
RS033	27K	27K
RS034	15K	15K
RS036	3300	3300
RS037	1500	1500
RS038	1500	1500
RS039	3300	3300
RS040	220(1/4W)	220(1/4W)
RS041	18	18
RS042	10	10
RS043	10	10
RS044	10K	10K
RS045	10K	10K
RS046	0	470
RS047	0	470
RS056		
RS057		
RS059	47K	47K
RS060		
RS061	0	0
RS062	220(1/4W)	220(1/4W)
RS070	0	0
TP5001	VJR0098	VJR0098
TP5002	VJR0098	VJR0098
TP5003	VJR0098	VJR0098
VR5001	2KB(CA)	2KB(CA)
VR5002	2KB(CA)	2KB(CA)

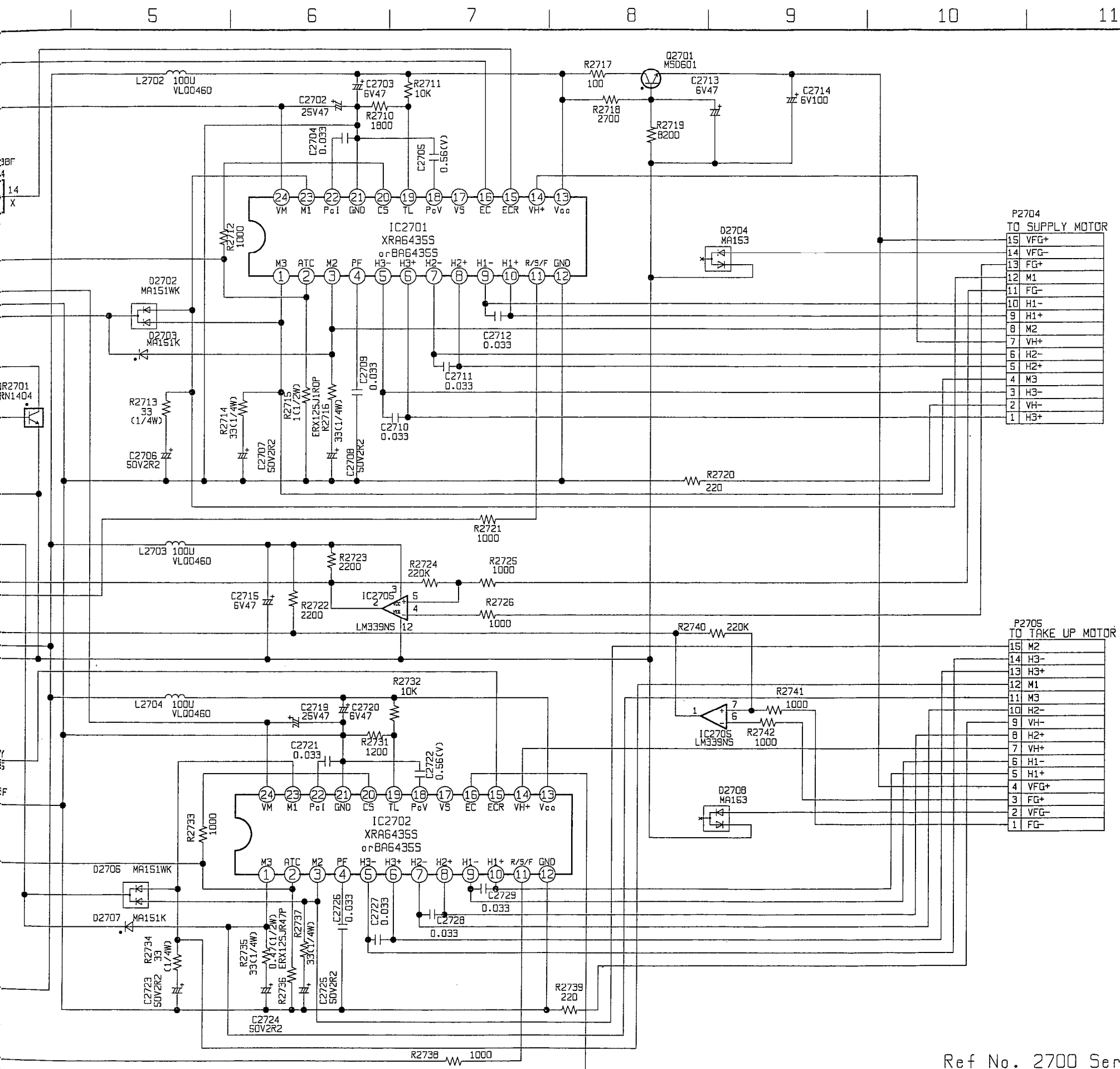


REEL DRIVE SCHEMATIC DIAGRAM (E14: Page CBA-18)

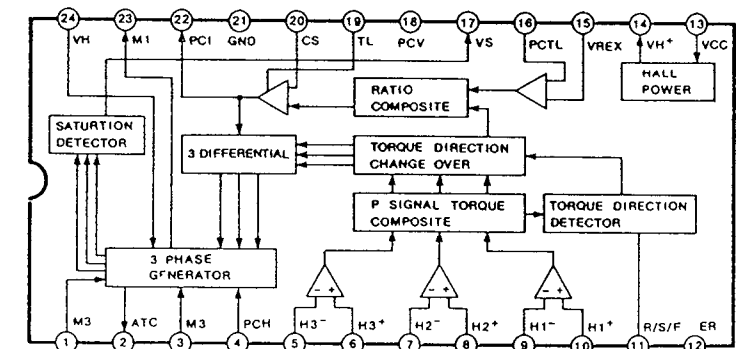


Ref No. 2700



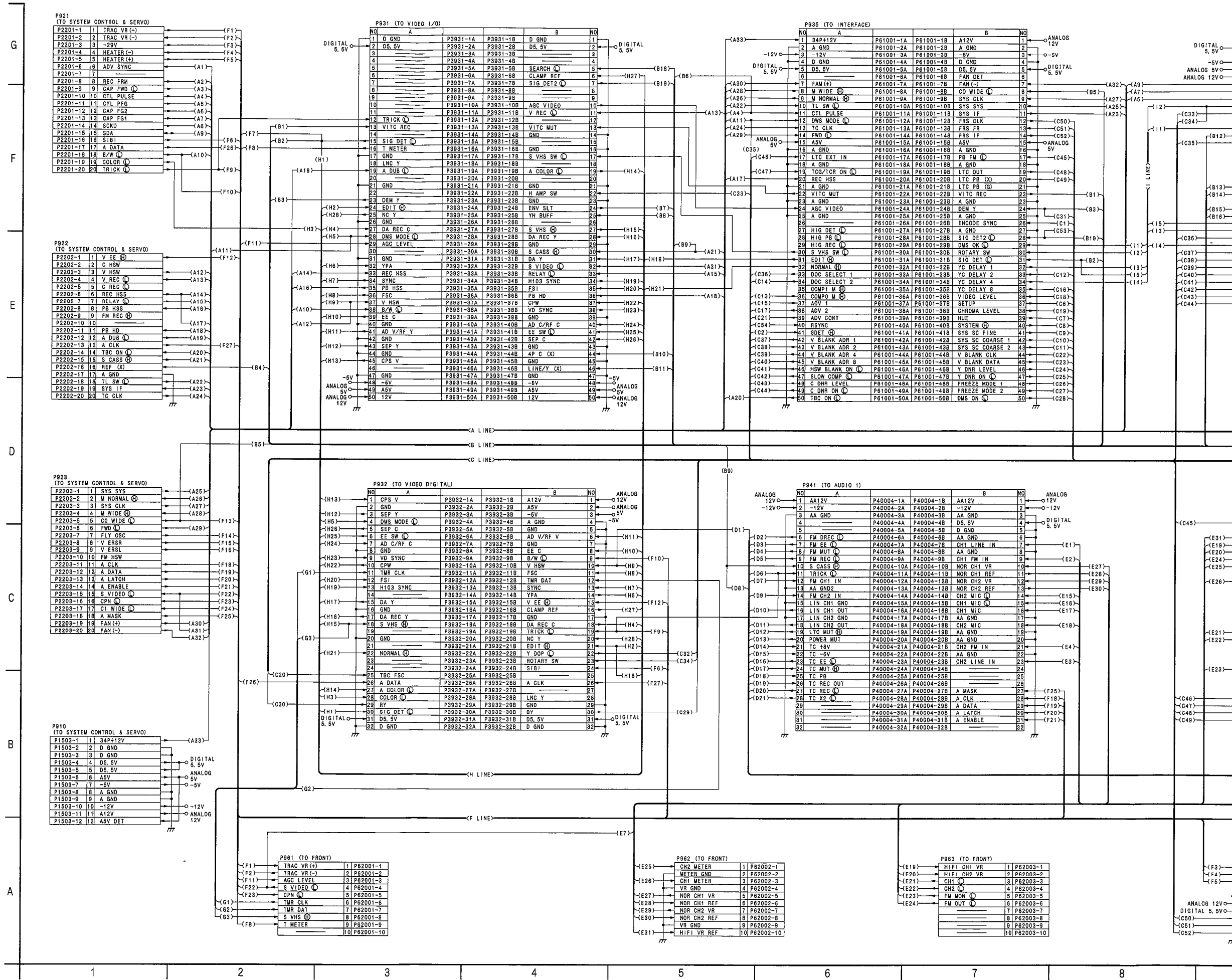


IC2701,2702  
XRA6435S(BA6435S)

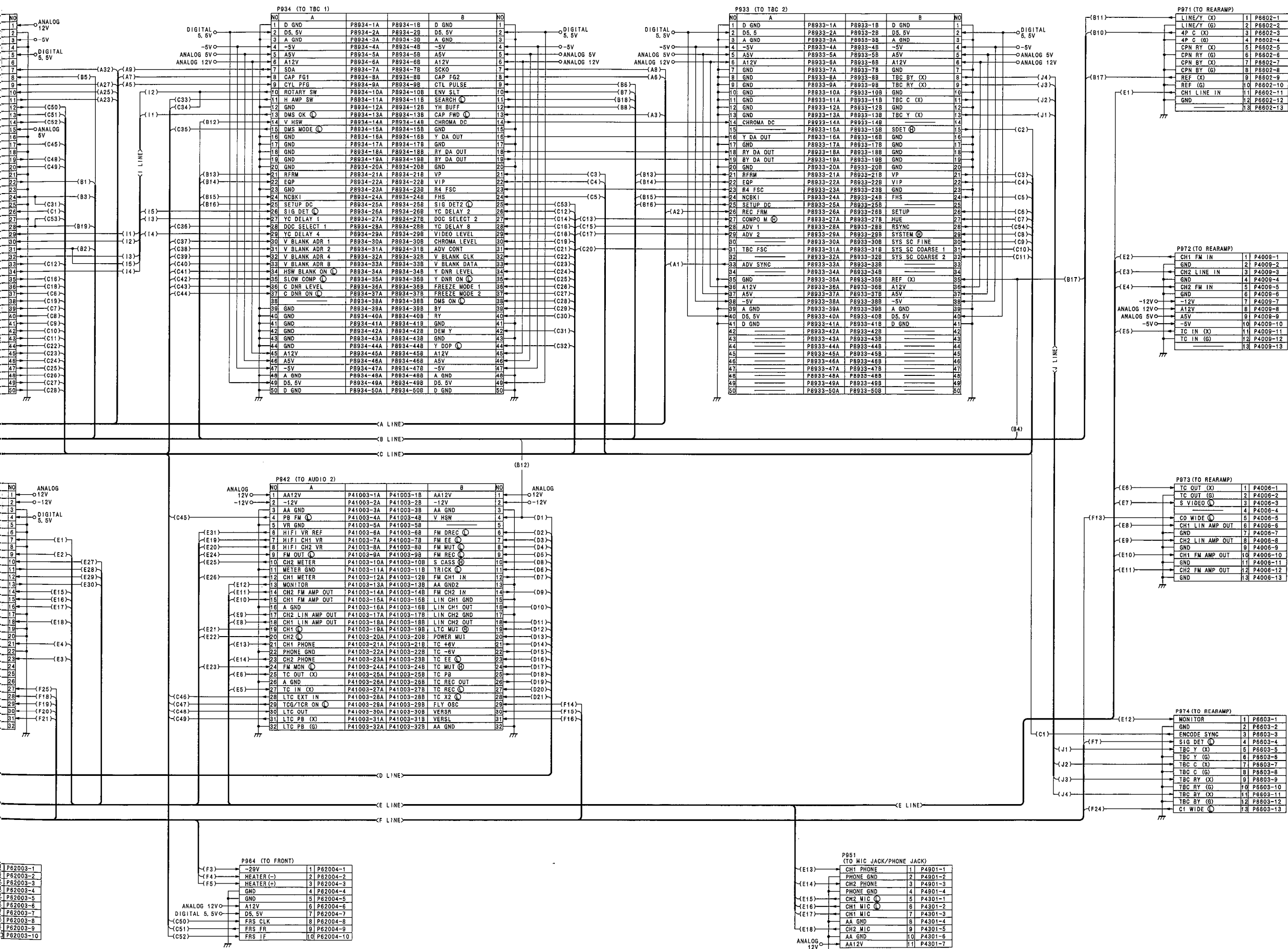




MOTHER SCHEMATIC DIAGRAM (E4: Page CBA-4)

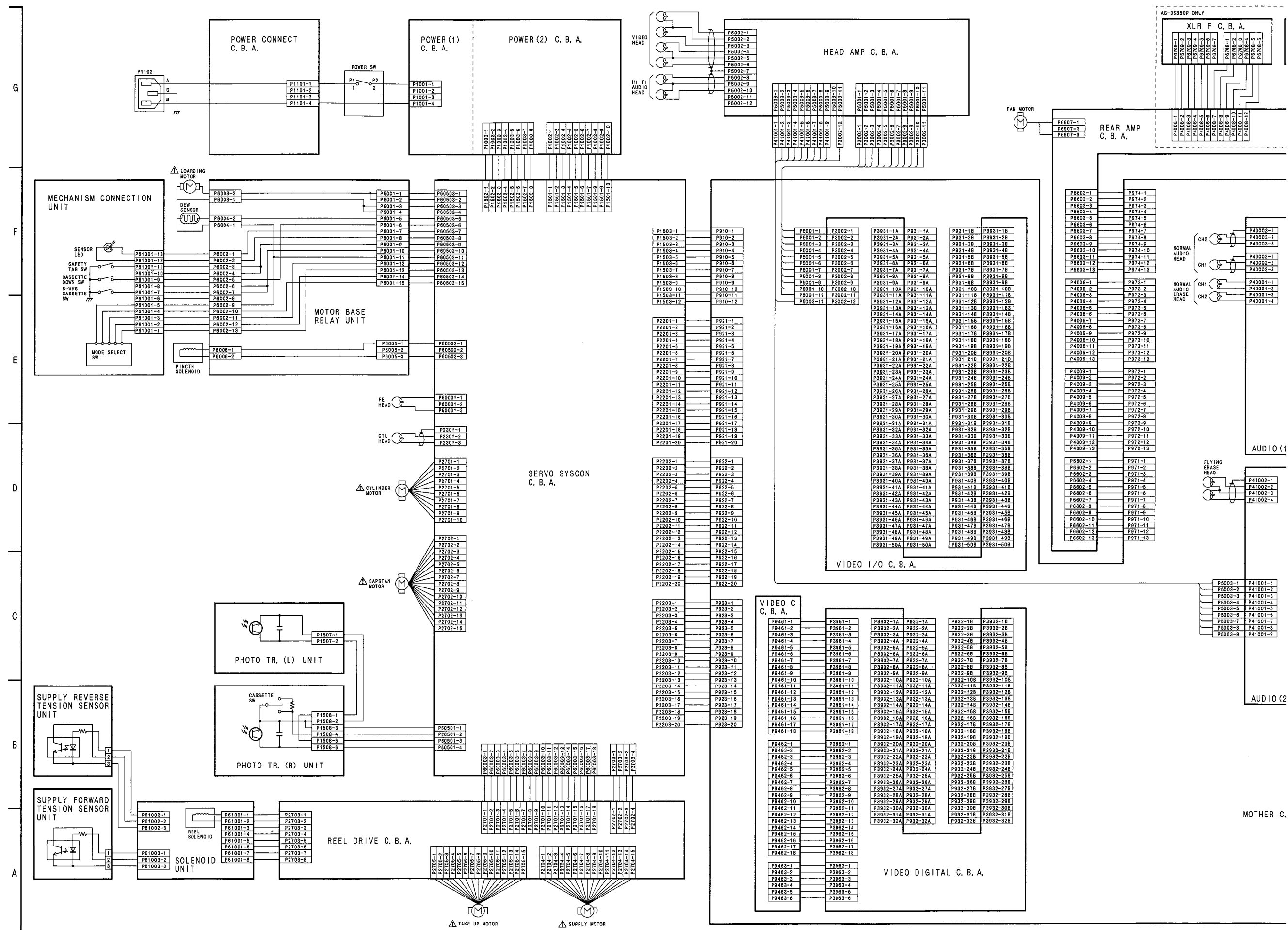








INTERCONNECTION SCHEMATIC DIAGRAM (: Page CBA-0)









# SECTION 4

## CIRCUIT BOARDS

### CONTENTS

POWER C.B.A. AND POWER (2) C.B.A. ....	CBA-3
MOTHER C.B.A., FRONT JACK C.B.A. AND MIC JACK C.B.A. ....	CBA-4
SERVO & SYSTEM CONTROL C.B.A. AND POWER DET SUB C.B.A. ....	CBA-5
VIDEO C.B.A. ....	CBA-6
VIDEO DIGITAL C.B.A. ....	CBA-7
VIDEO I/O C.B.A. AND VIDEO I/O SUB (1) C.B.A. ....	CBA-8
TBC (1) C.B.A. AND TBC SUB C.B.A. ....	CBA-9
TBC (2) C.B.A. ....	CBA-10
AUDIO (1) C.B.A. ....	CBA-11
AUDIO (2) C.B.A. ....	CBA-12
INTERFACE C.B.A., TIME CODE C.B.A. AND 9PIN CONNECT C.B.A. ....	CBA-13
FRONT C.B.A. AND FRONT LED C.B.A. ....	CBA-14
KEYBOARD C.B.A. ....	CBA-15
REAR JACK C.B.A. ....	CBA-15
REAR AMP C.B.A. ....	CBA-16
HEAD AMP C.B.A. ....	CBA-17
REEL DRIVE C.B.A. ....	CBA-18
XLR M C.B.A. AND XLR F C.B.A. ....	CBA-18



## IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED WITH THE MARK  $\triangle$  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.

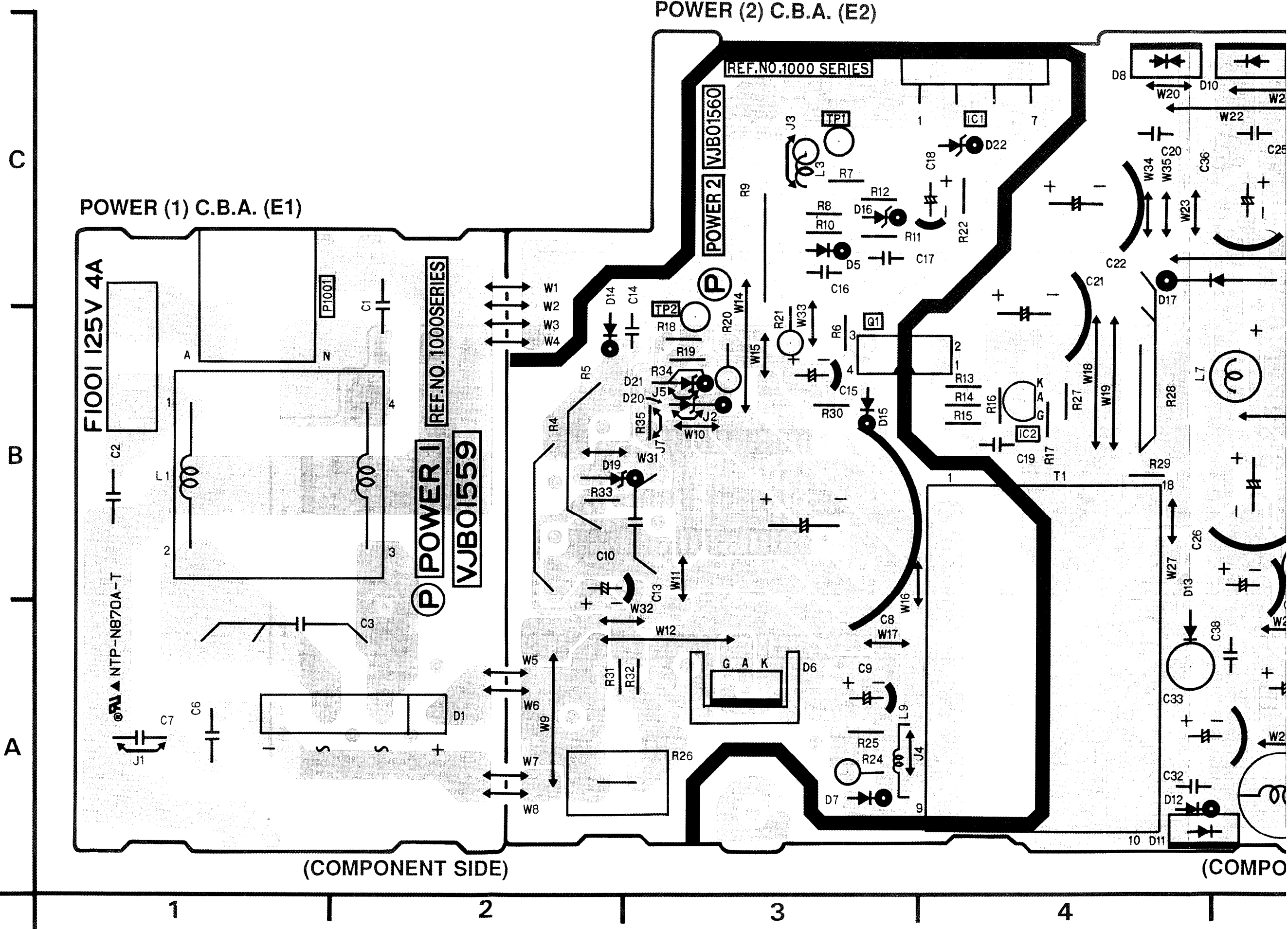
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

## NOTE

DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



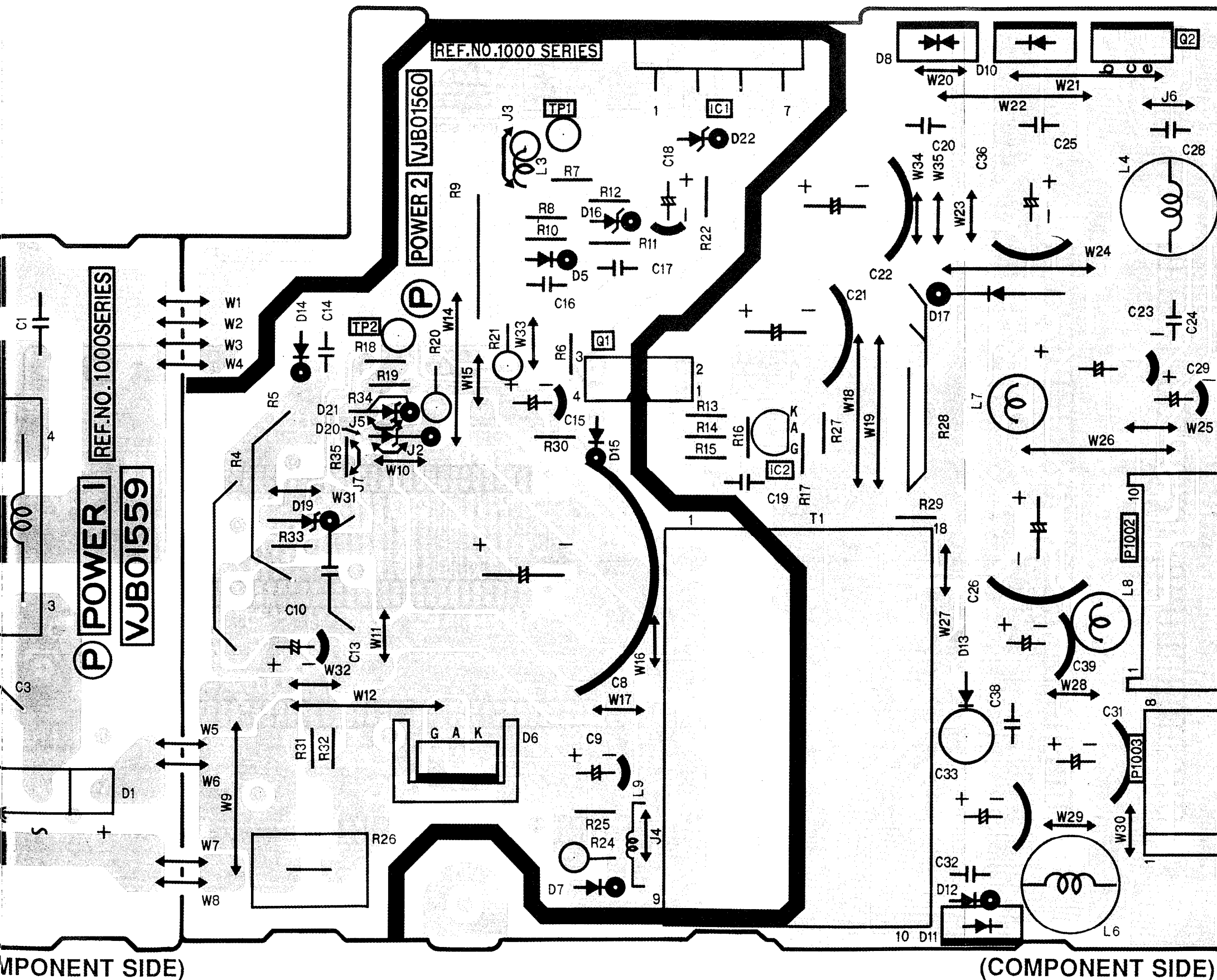
POWER (1) C.B.A. (E1) AND POWER (2) C.B.A. (E2)





R (2) C.B.A. (E2)

# POWER (2) C.B.A. (E2)



POWER (1) C.B.A.	
Connector	
P1001	C-1

ADDRESS INFORMATION

POWER (2) C.B.A.	
Transistor	
Q1001	B-3
Q1002	C-5
Integrated Circuit	
IC1001	C-4
IC1002	B-4
Test Point	
TP1001	C-3
TP1002	B-3
Connector	
P1002	B-5
P1003	A-5

ADDRESS INFORMATION







(COMPONENT SIDE)

MOTHER C.B.A.	
Connector	
P910	F-2
P921	D-8
P922	D-7
P923	D-5
P931	B-6
P932	B-6
P933	C-2
P934	C-2
P935	D-3
P941	D-7
P942	C-7
P951	E-3
P961	C-9
P962	C-9
P963	B-9
P964	A-9
P971	B-1
P972	C-1
P973	E-1
P974	D-1

### ADDRESS INFORMATION

<b>FRONT JACK C.B.A.</b>	
<b>Adjustment</b>	
VR4901	F-5
VR4902	F-5
VR4903	F-6
<b>Connector</b>	
P4901	F-5
P4902	F-6

### ADDRESS INFORMATION

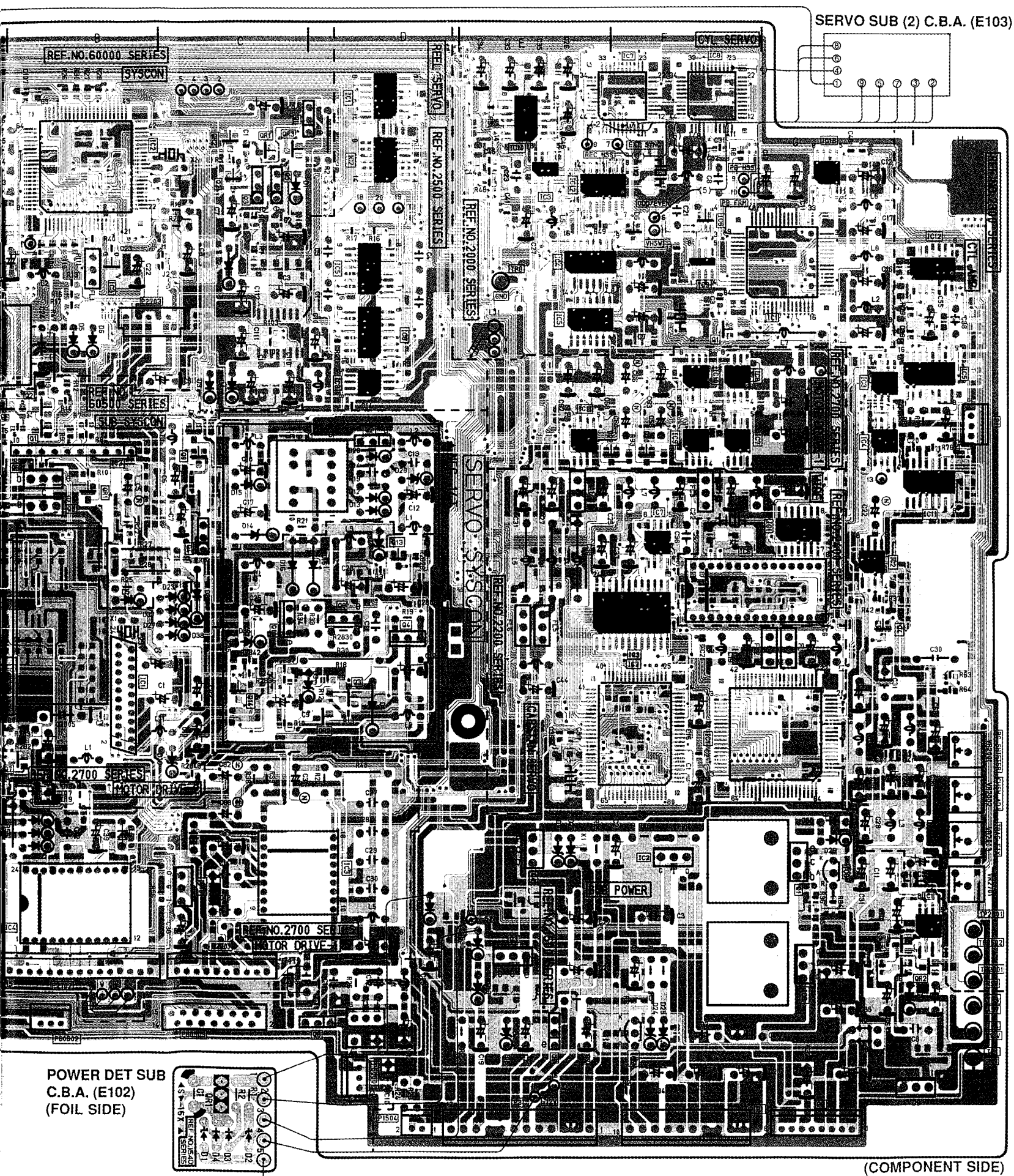
<b>MIC JACK C.B.A.</b>	
<b>Transistor</b>	
Q4301	E-8
<b>Integrated Circuit</b>	
IC4301	F-7
<b>Connector</b>	
P4301	E-8
P4301	E-9

### ADDRESS INFORMATION



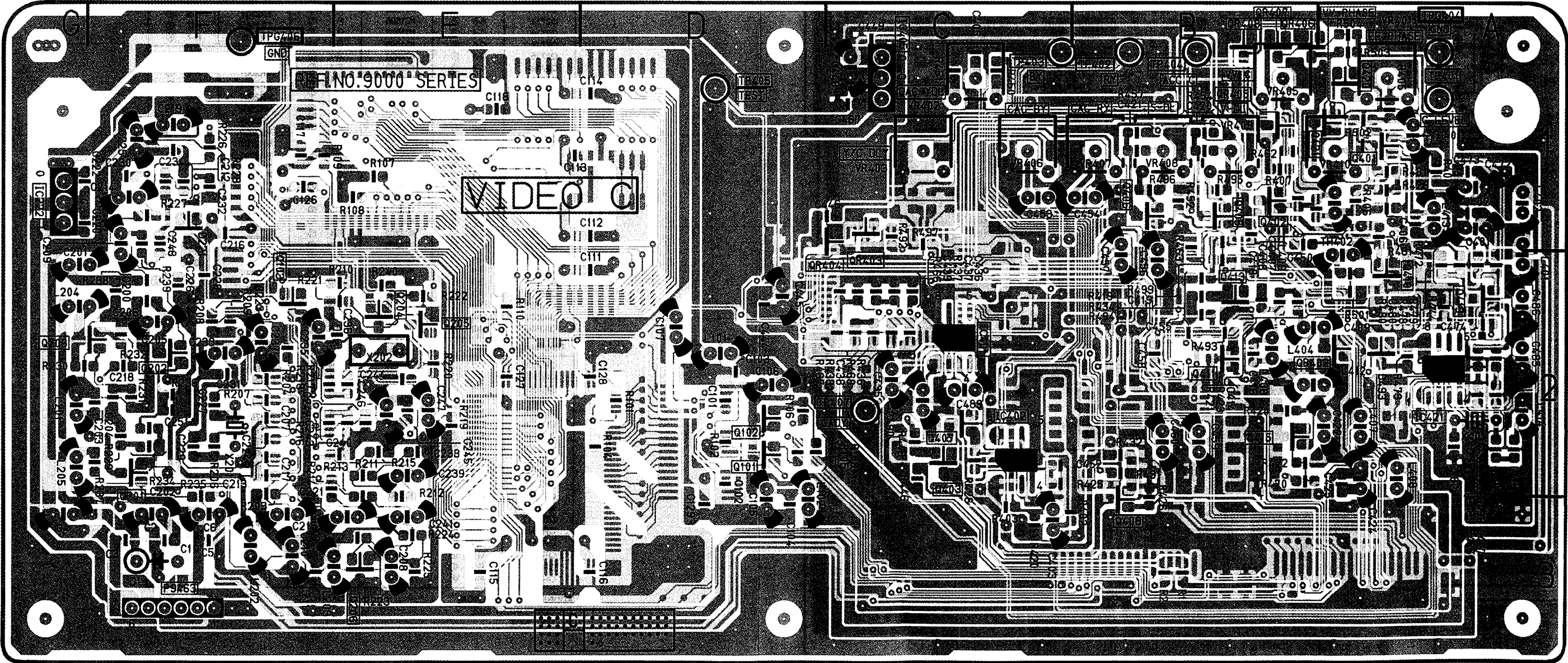




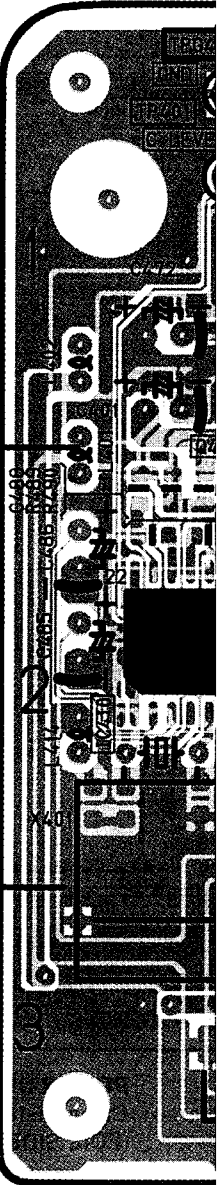


SERVO & SYSTEM CONTROL C.B.A.									
Transistor		QR2501		C-2		IC2706		A-4	
Q1501	G-6	QR2502	C-2	IC2707	F-3	IC2708	F-3	IC2709	F-3
Q1501	G-6	QR2503	C-2	IC2710	F-3	IC2711	F-3	IC2715	C-6
Q1502	D-3	QR2504	D-2	IC2715	C-6	IC2715	C-6	IC60001	A-3
Q1502	D-3	QR2505	D-1	IC60002	B-1	IC60003	B-2	IC60007	A-7
Q1503	E-7	QR2701	B-6	IC60101	C-3	IC60501	A-3	IC60502	B-3
Q1503	E-7	QR2702	D-5	IC60502	B-3	IC60503	C-4		
Q1504	E-6	QR2703	C-5						
Q1504	E-6	QR2704	B-5						
Q1505	E-7	QR60001	C-1						
Q1505	E-7	QR60002	C-1						
Q2001	F-3	QR60003	C-1						
Q2302	H-2	QR60004	C-2						
Q2303	G-4	QR60006	A-6						
Q2304	G-4	QR60007	B-2						
Q2305	H-4	QR60008	B-1						
Q2703	D-5	QR60010	A-3						
Q2704	D-5	QR60012	A-6						
Q2704	D-5	QR60501	B-4						
Q2705	D-5	QR60502	B-4						
Q2706	D-5	QR60503	B-4						
Q2707	B-5								
Q2708	B-4								
Q2708	D-7								
Q2709	D-4								
Q2709	D-4								
Q2710	C-4								
Q2710	C-4								
Q2711	A-6								
Q2711	A-6								
Q2713	D-4								
Q2714	C-5								
Q2715	D-4								
Q2716	C-4								
Q60001	C-1								
Q60001	C-1								
Q60002	C-2								
Q60003	C-2								
Q60003	C-2								
Q60004	C-2								
Q60005	C-2								
Q60005	C-2								
Q60006	C-2								
Q60007	B-1								
Q60008	D-7								
Q60501	B-3								
Q60502	B-3								
Q60503	B-3								
Q60504	C-4								
Q60504	C-4								
Q60505	B-4								
Q60506	B-3								
Q60506	B-3								
Q60507	B-4								
Q60508	B-4								
Q60509	C-3								
Transistor & Resistor		QR1501		G-7	P1501		F-7		
QR1502	H-7	QR1503	H-7	P1502	F-7	P1503	G-7		
QR2001	E-2	QR2002	E-2	P1502	G-7	P1503	E-7		
QR2002	E-2	QR2003	E-2	P1503	E-7	P1504	D-7		
QR2003	E-2	QR2005	E-1	P1504	D-7	P1504	A-2		
QR2304	G-3	QR2305	G-3	P2201	A-2	P2201	A-2		
QR2306	H-3	QR2308	H-3	P2202	A-4	P2202	A-3		
QR2309	H-2	QR2310	G-3	P2202	A-3	P2203	A-6		
QR2310	G-3	QR2311	G-2	P2203	A-6	P2203	A-6		
QR2311	G-2	QR2312	H-2	P2301	H-3	P2301	H-3		
QR2312	H-2	QR2313	H-4	P2701	C-7	P2701	C-7		
QR2313	H-4	QR2314	G-2	P2702	B-7	P2702	B-7		
QR2401	E-4	QR2402	F-4	P2702	B-7	P2703	B-2		
				P2703	B-2	P60001	D-7		
				P60001	D-7	P60003	A-2		
				P60003	A-2	P60003	A-2		
				P60501	A-4	P60501	A-4		
				P60501	A-3	P60502	B-7		
				P60502	B-7	P60502	B-7		
				P60503	C-7	P60503	C-7		
				P60503	C-7				





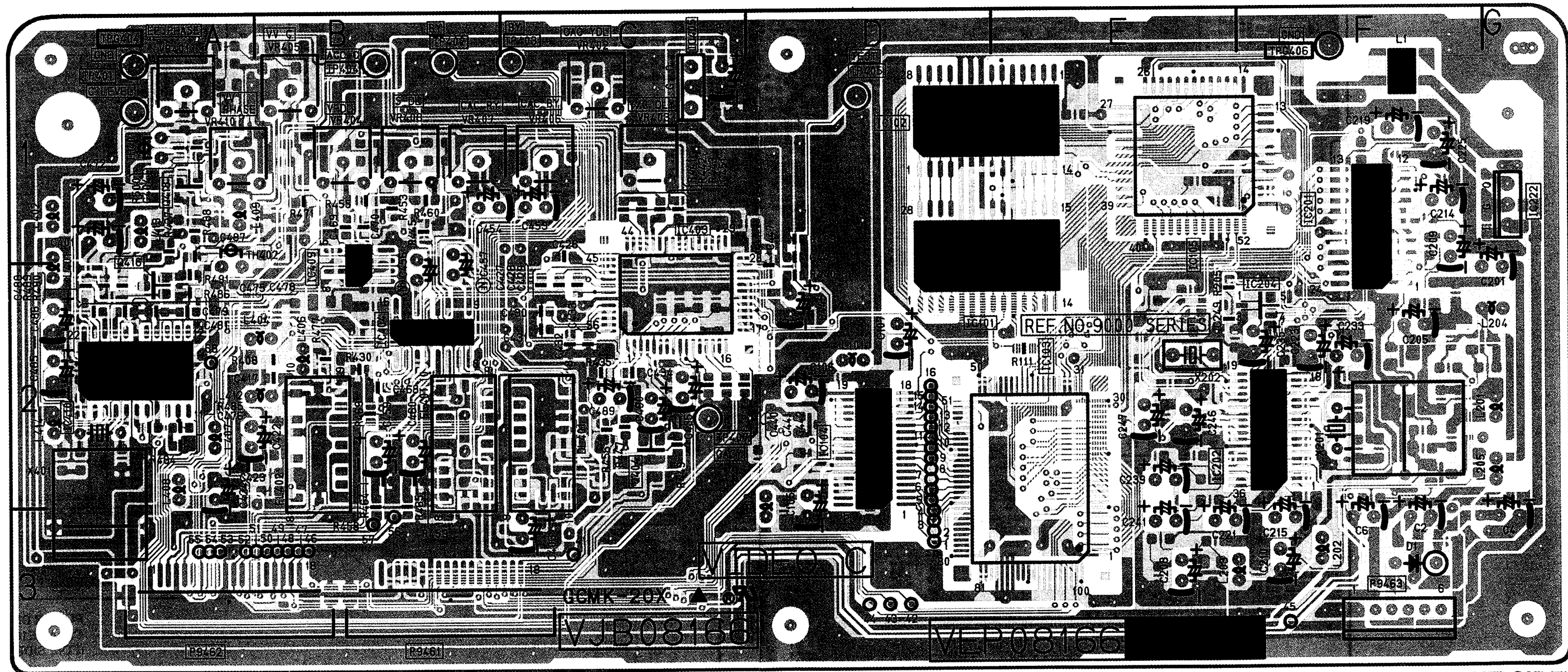
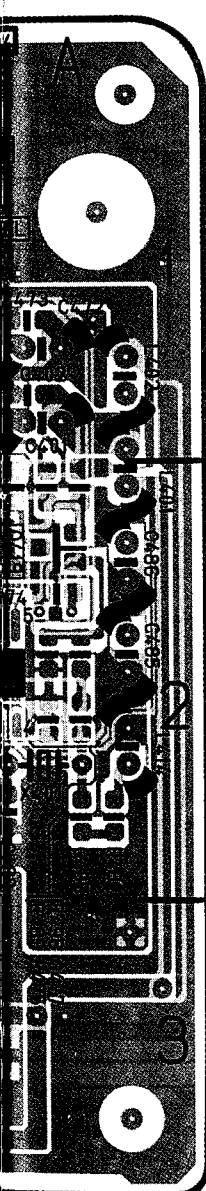
(FOIL SIDE)





VIDEO C C.B.A.																
Transistor		Q9415	B-2	Ⓕ	IC9105	E-1	Ⓕ	TP9403	C-1	Ⓕ	VR9405	B-1	Ⓕ			
Q9101	D-2	Ⓕ	Q9416	A-2	Ⓕ	IC9201	F-1	Ⓕ	TP9403	C-1	Ⓕ	VR9405	B-1	Ⓕ		
Q9102	D-2	Ⓕ	Q9418	A-1	Ⓕ	IC9202	F-2	Ⓕ	TP9404	B-1	Ⓕ	VR9406	C-1	Ⓕ		
Q9103	F-2	Ⓕ	Q9419	A-2	Ⓕ	IC9204	F-2	Ⓕ	TP9404	B-1	Ⓕ	VR9406	C-1	Ⓕ		
Q9201	F-2	Ⓕ	Q9420	A-1	Ⓕ	IC9222	G-1	Ⓕ	TP9405	D-1	Ⓕ	VR9407	B-1	Ⓕ		
Q9202	F-2	Ⓕ	Q9421	A-1	Ⓕ	IC9222	G-1	Ⓕ	TP9405	D-1	Ⓕ	VR9407	B-1	Ⓕ		
Q9203	G-2	Ⓕ	Transistor & Resistor			IC9401	C-2	Ⓕ	TP9407	C-2	Ⓕ	VR9408	B-1	Ⓕ		
Q9204	E-2	Ⓕ				IC9402	C-2	Ⓕ	TP9407	C-2	Ⓕ	VR9408	B-1	Ⓕ		
Q9205	E-2	Ⓕ	QR9402	A-2	Ⓕ	IC9403	C-2	Ⓕ	TPG9404	A-1	Ⓕ	VR9409	B-1	Ⓕ		
Q9206	E-3	Ⓕ	QR9403	C-1	Ⓕ	IC9404	B-2	Ⓕ	TPG9404	A-1	Ⓕ	VR9410	A-1	Ⓕ		
Q9401	A-1	Ⓕ	QR9404	C-1	Ⓕ	IC9405	C-1	Ⓕ	TPG9406	F-1	Ⓕ	VR9410	A-1	Ⓕ		
Q9402	B-1	Ⓕ	QR9405	B-1	Ⓕ	IC9405	C-1	Ⓕ	TPG9406	F-1	Ⓕ	Connector				
Q9403	C-2	Ⓕ	QR9406	B-1	Ⓕ	IC9409	B-2	Ⓕ	Adjustment			P9461	B-3	Ⓕ		
Q9404	C-2	Ⓕ	QR9407	B-1	Ⓕ	IC9410	A-2	Ⓕ	VR9401	A-1	Ⓕ	P9462	A-3	Ⓕ		
Q9405	B-1	Ⓕ	QR9408	B-1	Ⓕ	IC9421	A-2	Ⓕ	VR9401	A-1	Ⓕ	P9463	F-3	Ⓕ		
Q9406	B-1	Ⓕ	Integrated Circuit			Test Point			VR9402	C-1	Ⓕ	P9463	F-3	Ⓕ		
Q9407	C-2	Ⓕ							VR9402	C-1	Ⓕ					
Q9408	B-3	Ⓕ	IC9101	D-2	Ⓕ	TP9401	A-1	Ⓕ	VR9402	C-1	Ⓕ					
Q9410	A-2	Ⓕ	IC9102	D-1	Ⓕ	TP9401	A-1	Ⓕ	VR9403	C-1	Ⓕ					
Q9411	B-2	Ⓕ	IC9103	E-2	Ⓕ	TP9402	B-1	Ⓕ	VR9403	C-1	Ⓕ					
Q9413	B-2	Ⓕ	IC9104	D-2	Ⓕ	TP9402	B-1	Ⓕ	VR9404	B-1	Ⓕ					

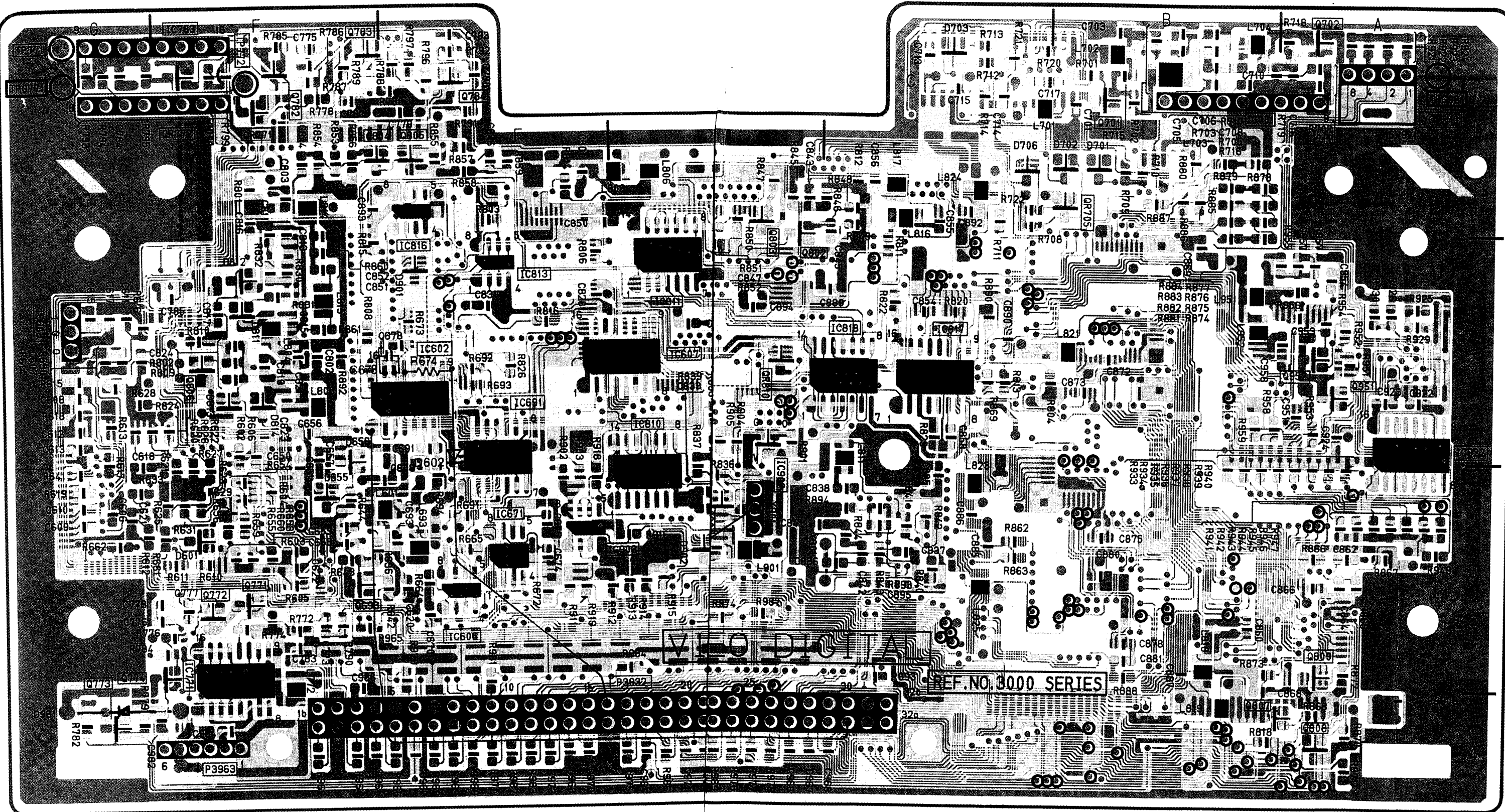
ADDRESS INFORMATION  
 @...COMPONENT SIDE  
 @...FOIL SIDE



(FOIL SIDE)

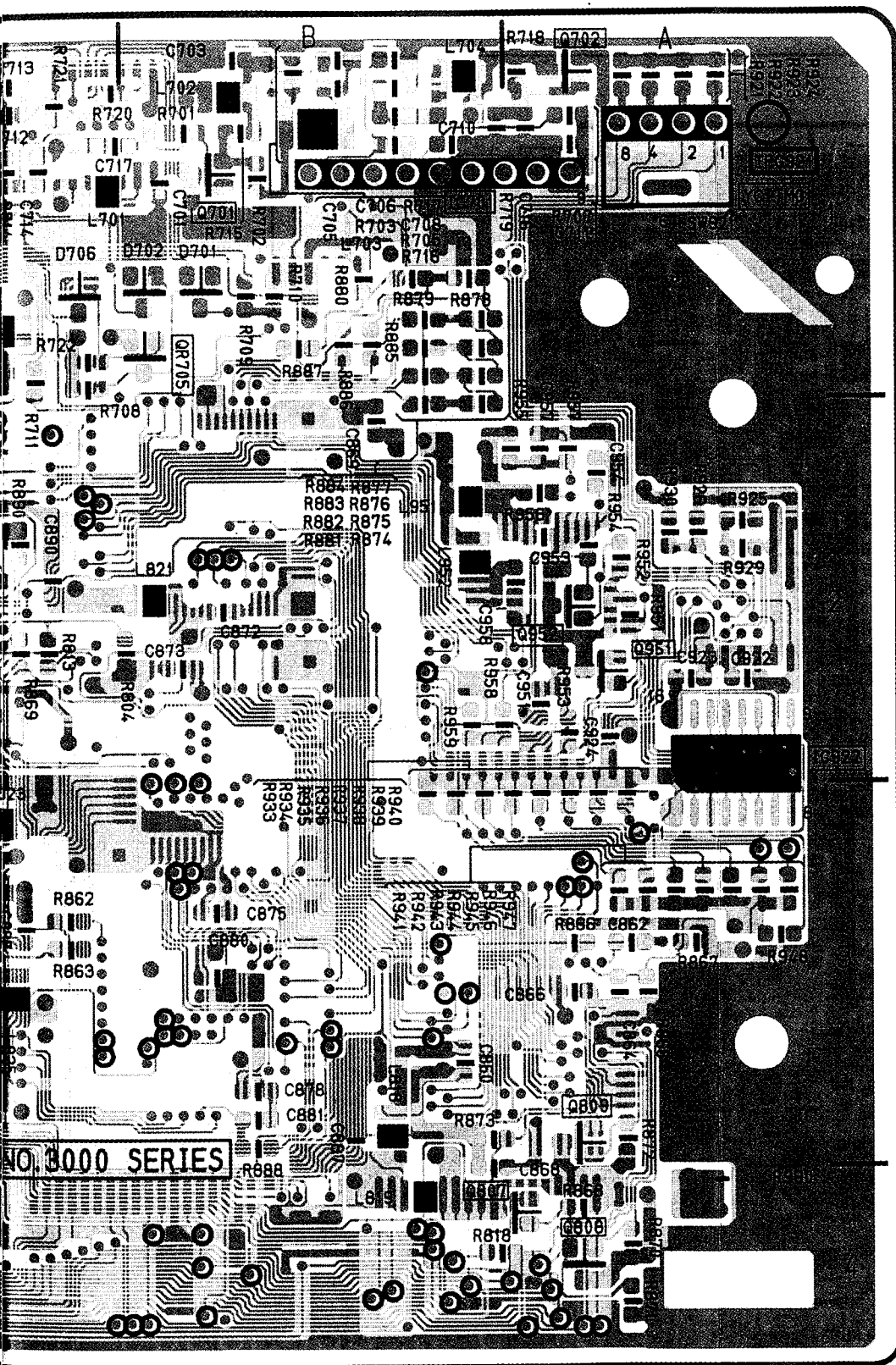
(COMPONENT SIDE)



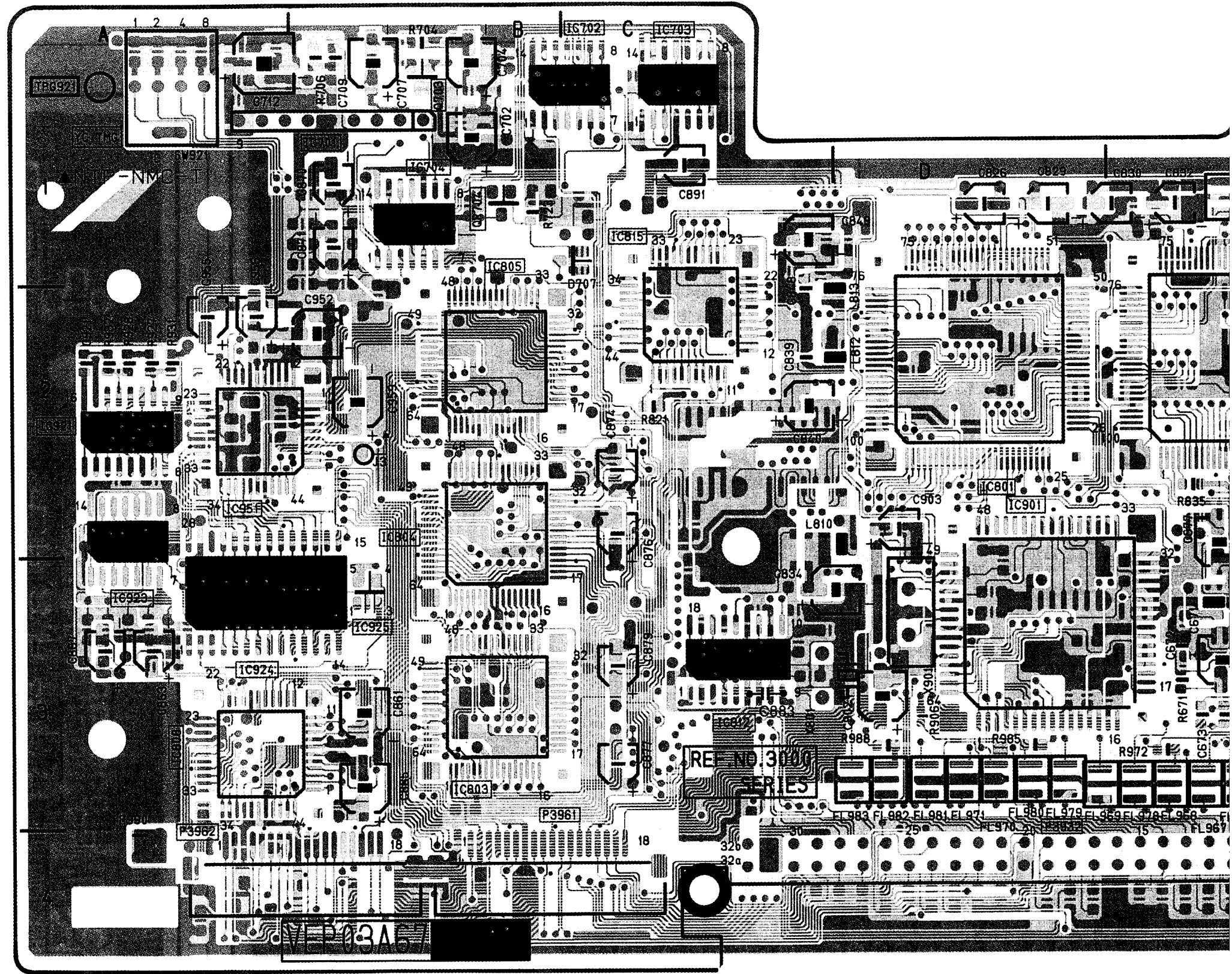


(FOIL SIDE)

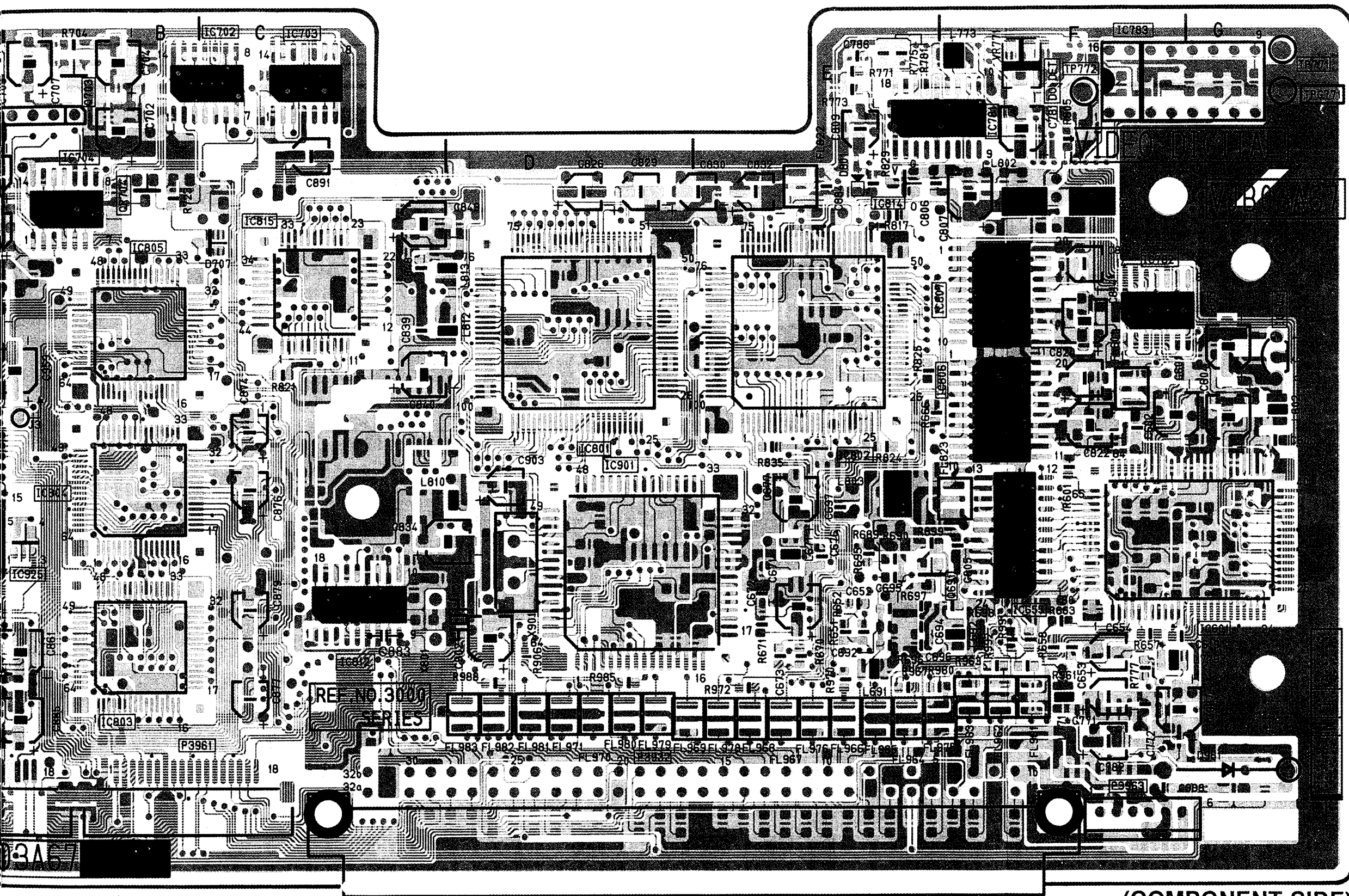




(FOIL SIDE)







(COMPONENT SIDE)

VIDEO DIGITAL C.B.A.					
Transistor		IC3782		F-2	
Q3691	E-3	IC3783	F-1	IC3783	F-1
Q3693	F-3	IC3801	D-2	IC3802	E-2
Q3701	B-1	IC3803	B-3	IC3804	B-2
Q3702	A-1	IC3805	F-2	IC3806	A-3
Q3703	B-1	IC3810	D-3	IC3811	D-2
Q3771	F-3	IC3812	C-3	IC3813	E-2
Q3772	F-3	IC3814	E-1	IC3815	C-1
Q3773	G-4	IC3816	E-1	IC3817	C-2
Q3774	F-3	IC3901	D-3	IC3902	D-3
Q3782	F-1	IC3903	E-3	IC3921	A-2
Q3784	E-1	IC3922	A-2	IC3923	A-3
Q3801	D-3	IC3924	B-3	IC3925	A-3
Q3802	D-2	IC3951	A-2		
Q3803	D-1				
Q3804	F-1				
Q3805	E-1				
Q3806	F-2				
Q3807	A-4				
Q3808	A-4				
Q3809	A-3				
Q3951	A-2				
Q3952	A-2				
Transistor & Resistor		Test Point			
QR3704	B-1	TP3771	G-1	TP3772	G-1
QR3705	B-1	TP3772	F-1	TP3772	F-1
QR3771	F-1	TPG3771	G-1	TPG3771	G-1
QR3772	F-1	TPG3921	A-1	TPG3921	A-1
QR3810	D-2				
Integrated Circuit		Adjustment		Connector	
IC3307	F-2	VR3771	F-1	P3932	D-4
IC3601	G-3			P3932	D-4
IC3602	E-2			P3961	B-3
IC3603	G-2			P3962	A-4
IC3603	G-2			P3963	F-4
IC3606	E-3			P3963	F-4
IC3607	D-2				
IC3655	F-3				
IC3671	E-3				
IC3691	E-2				
IC3701	B-1				
IC3701	B-1				
IC3702	C-1				
IC3703	C-1				
IC3704	B-1				
IC3771	F-3				
IC3781	F-1				

ADDRESS INFORMATION  
 @...COMPONENT SIDE  
 @...FOIL SIDE

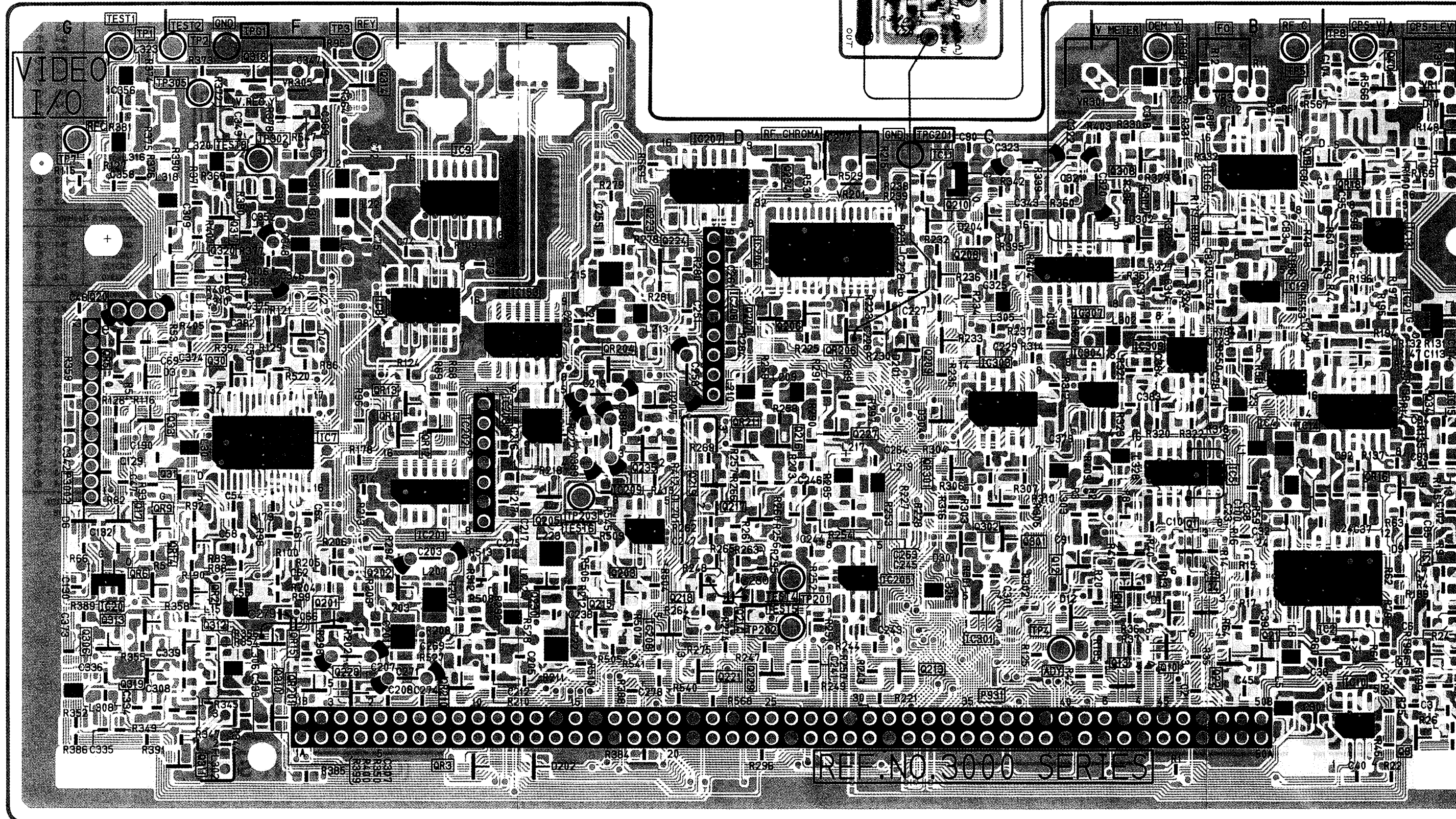


# VIDEO I/O C.B.A. (E5) AND VIDEO I/O SUB (1) C.B.A. (E104)

## VIDEO I/O SUB (1) C.B.A. (E104)

(FOIL SIDE)

## VIDEO I/O C.B.A. (E5)

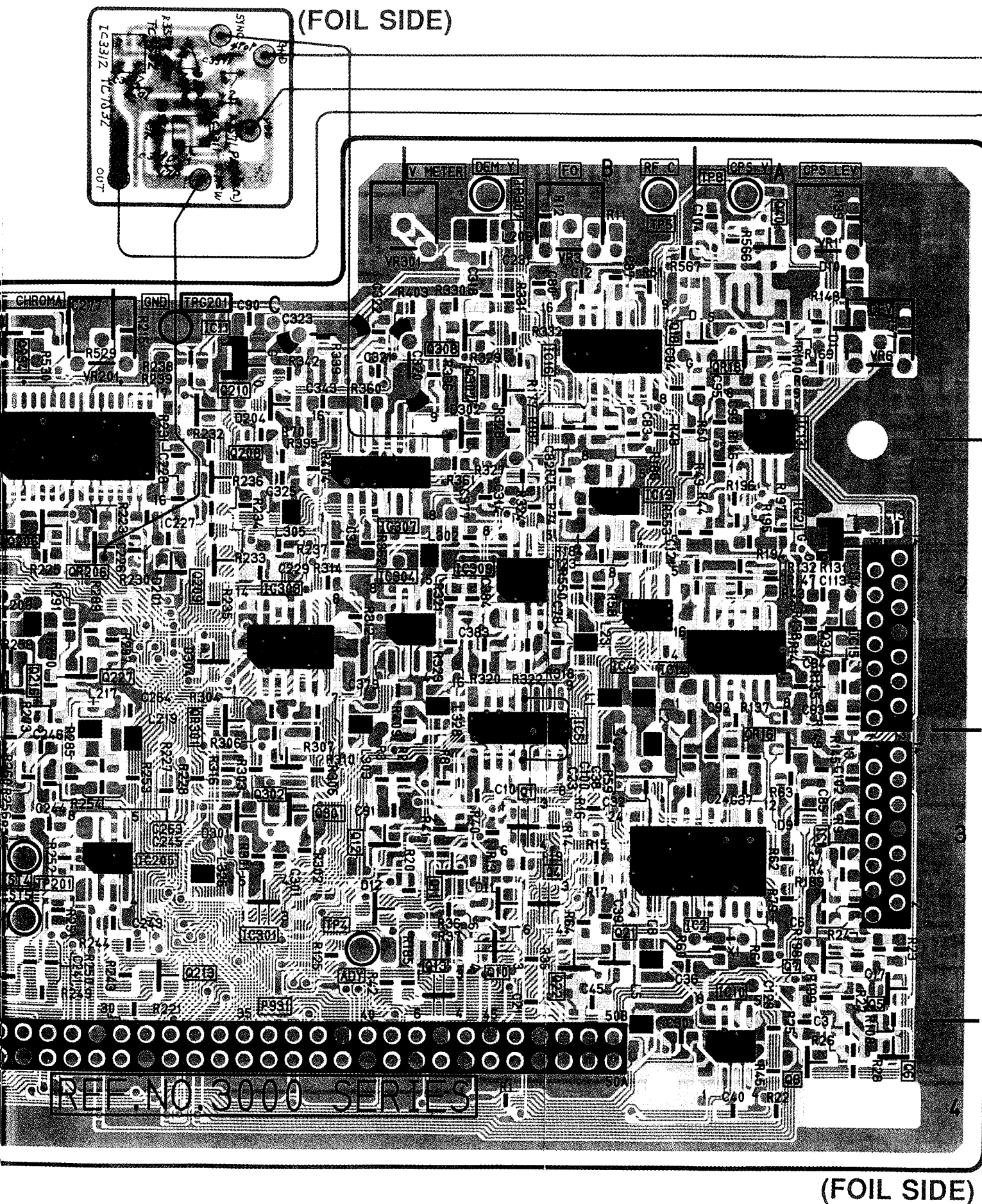


(FC

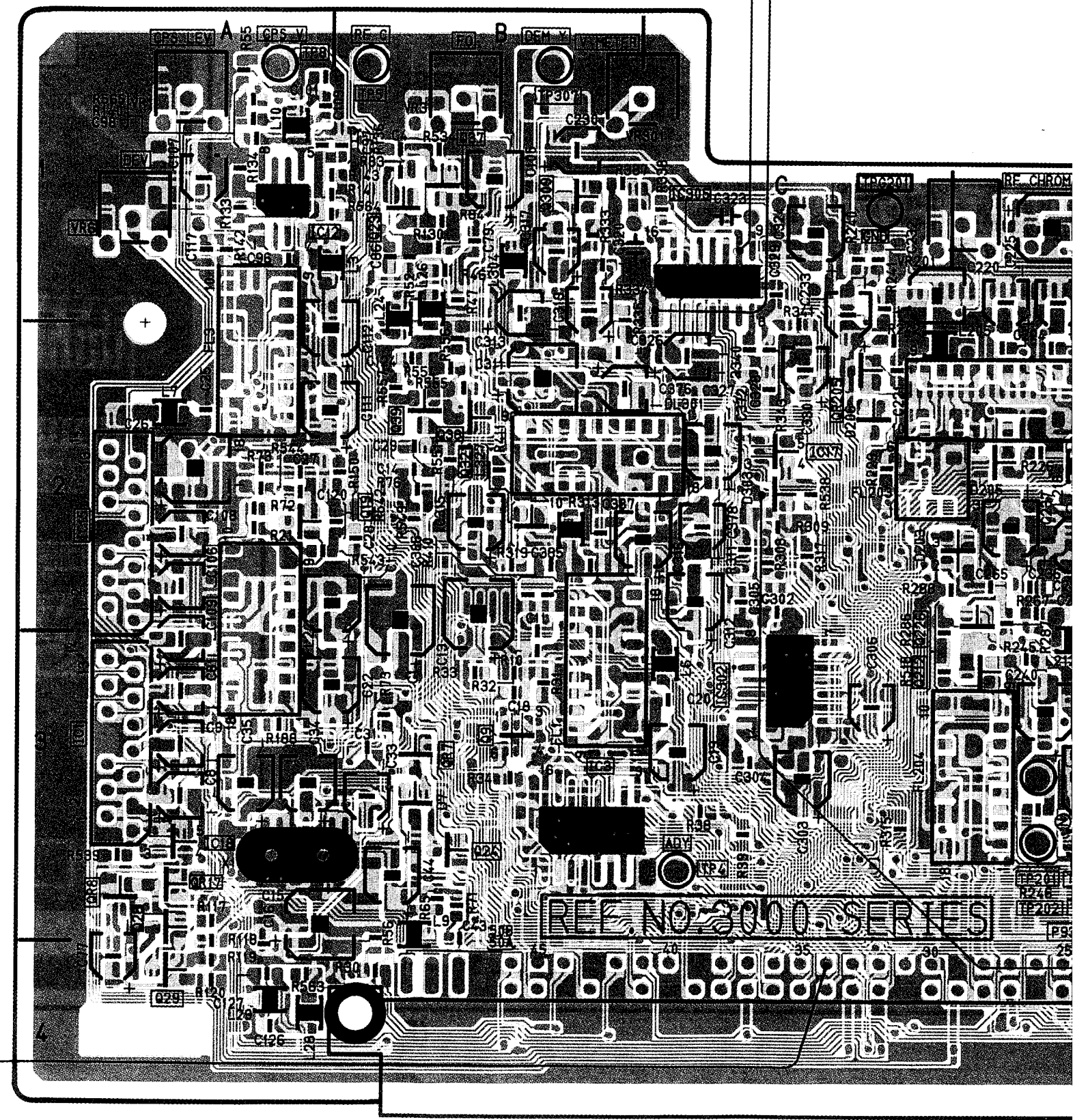


DEO I/O SUB (1) C.B.A. (E104)

(FOIL SIDE)



(FOIL SIDE)









TBC (1) C.B.A. (E11) AND TBC SUB C.B.A. (E101)

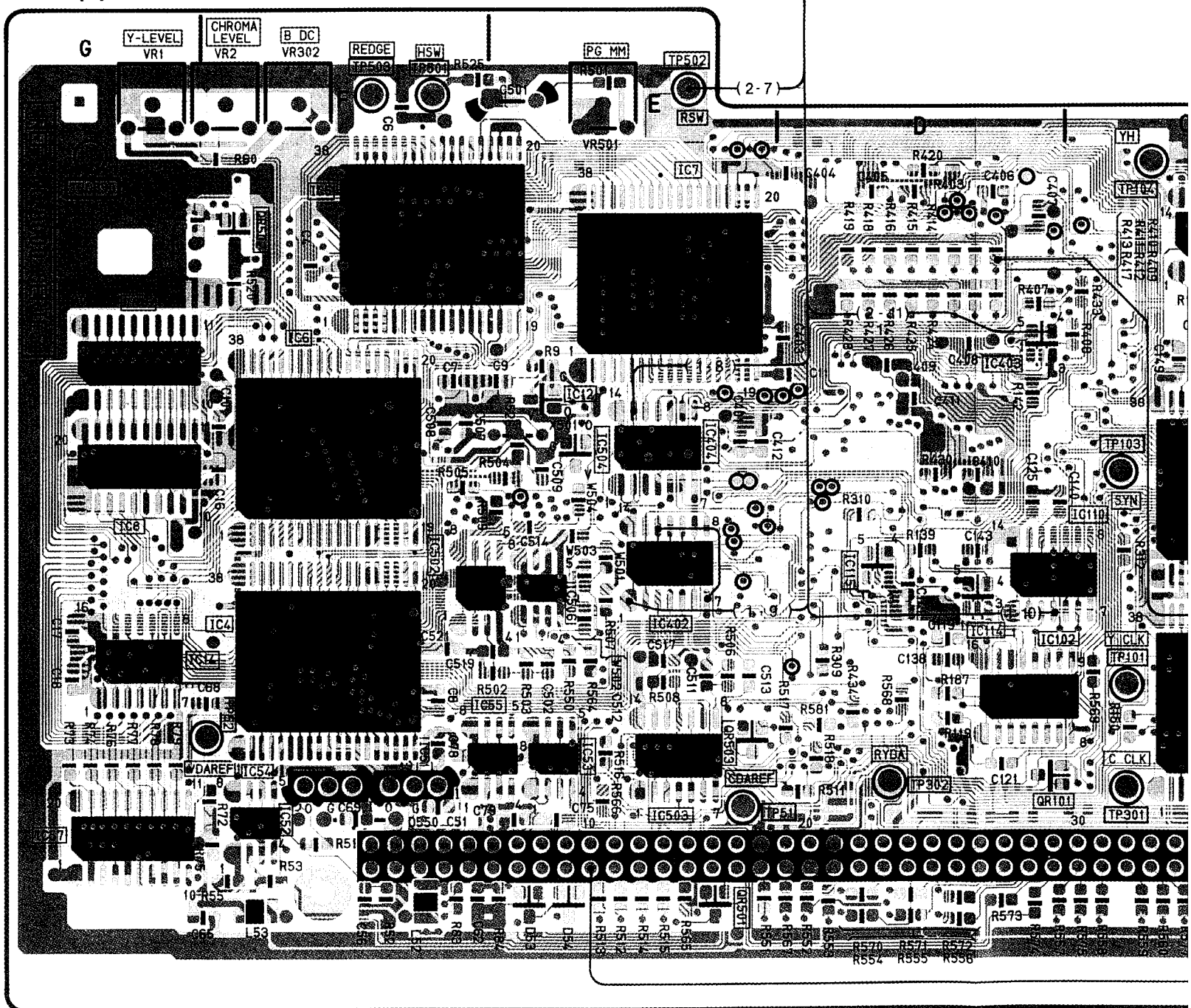
VIDEO I/O C.B.A.					
Transistor					
Q3001	B-3	Q3309	B-1	IC3209	D-3
Q3004	B-3	Q3310	F-4	IC3301	C-3
Q3005	A-3	Q3311	F-4	IC3302	C-3
Q3006	A-4	Q3312	F-3	IC3303	C-2
Q3007	A-3	Q3313	G-3	IC3304	B-2
Q3008	A-4	Q3314	F-1	IC3305	C-1
Q3009	B-3	Q3315	G-4	IC3306	G-3
Q3010	B-3	Q3316	F-1	IC3307	B-2
Q3011	B-3	Q3317	F-1	IC3308	F-2
Q3012	C-3	Q3318	F-1	IC3309	B-2
Q3013	B-3	Q3319	G-3	IC3310	F-2
Q3017	G-3	Q3320	F-2	Test Point	
Q3018	A-1	Q3321	B-2		
Q3019	B-2	Transistor & Resistor		TP3001	G-1
Q3020	G-2	QR3002	F-3	TP3001	G-1
Q3020	G-2	QR3003	E-4	TP3002	F-1
Q3021	B-3	QR3005	G-2	TP3002	F-1
Q3022	B-3	QR3006	G-3	TP3003	F-1
Q3023	B-1	QR3007	B-3	TP3003	F-1
Q3024	B-3	QR3008	A-3	TP3004	C-3
Q3025	F-3	QR3009	G-3	TP3004	C-3
Q3026	F-3	QR3010	F-3	TP3005	B-1
Q3027	F-2	QR3011	E-2	TP3005	B-1
Q3028	A-3	QR3012	E-2	TP3007	G-1
Q3029	A-4	QR3013	E-2	TP3007	G-1
Q3030	F-2	QR3014	F-3	TP3008	A-1
Q3031	F-3	QR3015	F-3	TP3008	A-1
Q3032	F-2	QR3016	A-3	TP3201	D-3
Q3033	G-2	QR3017	A-3	TP3201	D-3
Q3034	A-2	QR3018	A-1	TP3202	D-3
Q3037	B-1	QR3201	F-3	TP3202	D-3
Q3038	B-2	QR3204	E-2	TP3203	E-3
Q3039	B-2	QR3205	C-2	TP3203	E-3
Q3040	A-1	QR3206	D-2	TP3302	F-1
Q3201	F-3	QR3209	F-3	TP3302	F-1
Q3202	E-3	QR3210	E-3	TP3305	F-1
Q3203	D-3	QR3211	D-2	TP3305	F-1
Q3204	E-3	QR3212	D-2	TP3307	B-1
Q3205	E-3	QR3301	C-2	TP3307	B-1
Q3206	D-2	Integrated Circuit		TPG3001	F-1
Q3207	D-2	IC3001	A-3	TPG3001	F-1
Q3208	C-2	IC3001	A-3	TPG3201	C-1
Q3209	C-2	IC3002	A-3	TPG3201	C-1
Q3210	C-1	IC3003	B-3	Adjustment	
Q3211	E-3	IC3003	B-3	VR3001	A-1
Q3212	D-3	IC3004	B-2	VR3001	A-1
Q3213	C-3	IC3005	B-2	VR3003	B-1
Q3214	D-3	IC3006	G-3	VR3003	B-1
Q3215	E-3	IC3007	F-2	VR3006	A-1
Q3216	D-2	IC3008	E-2	VR3006	A-1
Q3217	D-3	IC3009	E-1	VR3007	E-1
Q3218	D-3	IC3010	A-4	VR3008	E-1
Q3219	D-3	IC3011	C-1	VR3009	E-1
Q3220	D-3	IC3012	A-1	VR3010	E-1
Q3221	D-3	IC3013	A-1	VR3011	E-1
Q3222	D-2	IC3014	A-2	VR3014	E-1
Q3223	D-1	IC3015	A-2	VR3015	E-1
Q3224	D-2	IC3015	A-2	VR3201	C-1
Q3225	E-3	IC3016	B-1	VR3201	D-1
Q3226	D-2	IC3017	C-2	VR3202	D-3
Q3227	D-2	IC3018	A-3	VR3202	D-3
Q3228	F-3	IC3019	B-2	VR3204	D-3
Q3229	D-3	IC3020	G-3	VR3205	E-3
Q3230	E-3	IC3020	G-3	VR3205	E-3
Q3231	D-3	IC3021	A-2	VR3301	B-1
Q3232	E-3	IC3153	E-2	VR3301	B-1
Q3233	E-3	IC3201	E-3	VR3305	F-1
Q3234	D-1	IC3202	E-2	VR3305	F-1
Q3235	D-2	IC3202	E-2	Connector	
Q3236	D-2	IC3203	E-2	P931	D-3
Q3301	C-3	IC3204	D-2	P3002	G-2
Q3302	C-3	IC3205	C-3	P3002	G-2
Q3306	G-3	IC3206	D-2	P3931	C-4
Q3307	B-1	IC3206	D-2		
Q3308	B-1	IC3207	D-1		
		IC3208	D-3		

ADDRESS INFORMATION  
⊙...COMPONENT SIDE  
⊙...FOIL SIDE

TBC (1) C.B.A.				
Transistor				
Q8101	A-3	IC8312	B-3	⊙
Q8102	A-3	IC8312	B-3	⊙
Q8103	A-3	IC8401	D-2	⊙
Q8201	B-2	IC8402	E-2	⊙
Q8202	B-2	IC8403	D-2	⊙
Q8203	A-2	IC8404	E-2	⊙
Q8204	B-1	IC8501	F-2	⊙
Q8205	A-2	IC8502	F-2	⊙
Q8206	A-1	IC8503	E-3	⊙
Q8207	B-2	IC8504	E-2	⊙
		IC8506	E-3	⊙
		Test Point		
Transistor & Resistor				
QR8101	D-3	TP8051	E-3	⊙
QR8201	A-2	TP8051	E-3	⊙
QR8202	A-2	TP8052	G-3	⊙
QR8501	E-4	TP8052	F-3	⊙
QR8502	F-1	TP8101	C-3	⊙
QR8503	E-3	TP8101	C-3	⊙
		TP8102	B-3	⊙
		TP8102	A-3	⊙
		TP8103	C-2	⊙
		TP8103	C-2	⊙
		TP8104	C-1	⊙
		TP8104	C-1	⊙
		TP8105	B-2	⊙
		TP8105	B-2	⊙
		TP8201	B-1	⊙
		TP8201	B-1	⊙
		TP8202	A-1	⊙
		TP8202	A-1	⊙
		TP8203	A-1	⊙
		TP8203	A-1	⊙
		TP8301	C-3	⊙
		TP8301	C-3	⊙
		TP8302	D-3	⊙
		TP8302	D-3	⊙
		TP8501	F-1	⊙
		TP8501	F-1	⊙
		TP8502	E-1	⊙
		TP8502	E-1	⊙
		TP8503	F-1	⊙
		TP8503	F-1	⊙
		TPG8550	G-1	⊙
		TPG8550	G-1	⊙
		TPG8551	B-3	⊙
		TPG8551	B-3	⊙
		Adjustment		
		VC8101	A-3	⊙
		VR8001	G-1	⊙
		VR8001	G-1	⊙
		VR8002	F-1	⊙
		VR8002	F-1	⊙
		VR8101	C-3	⊙
		VR8102	C-1	⊙
		VR8103	C-1	⊙
		VR8201	B-1	⊙
		VR8201	B-1	⊙
		VR8202	B-1	⊙
		VR8202	B-1	⊙
		VR8203	B-1	⊙
		VR8204	A-1	⊙
		VR8205	A-1	⊙
		VR8301	B-3	⊙
		VR8302	F-1	⊙
		VR8302	F-1	⊙
		VR8501	E-1	⊙
		VR8501	E-1	⊙
		Connector		
		P8934	C-3	⊙
		P8934	B-3	⊙

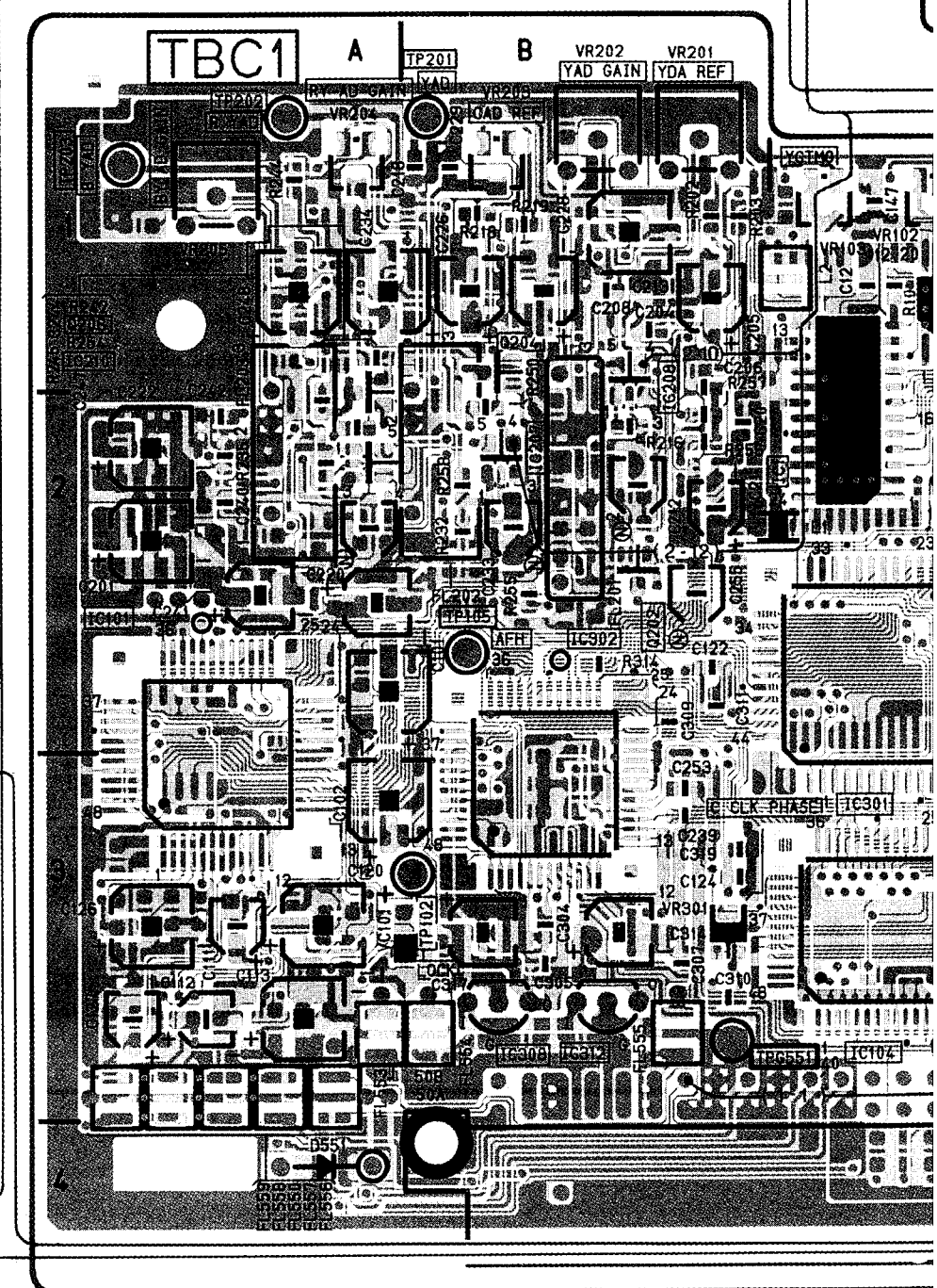
ADDRESS INFORMATION  
⊙...COMPONENT SIDE  
⊙...FOIL SIDE

TBC (1) C.B.A. (E11)



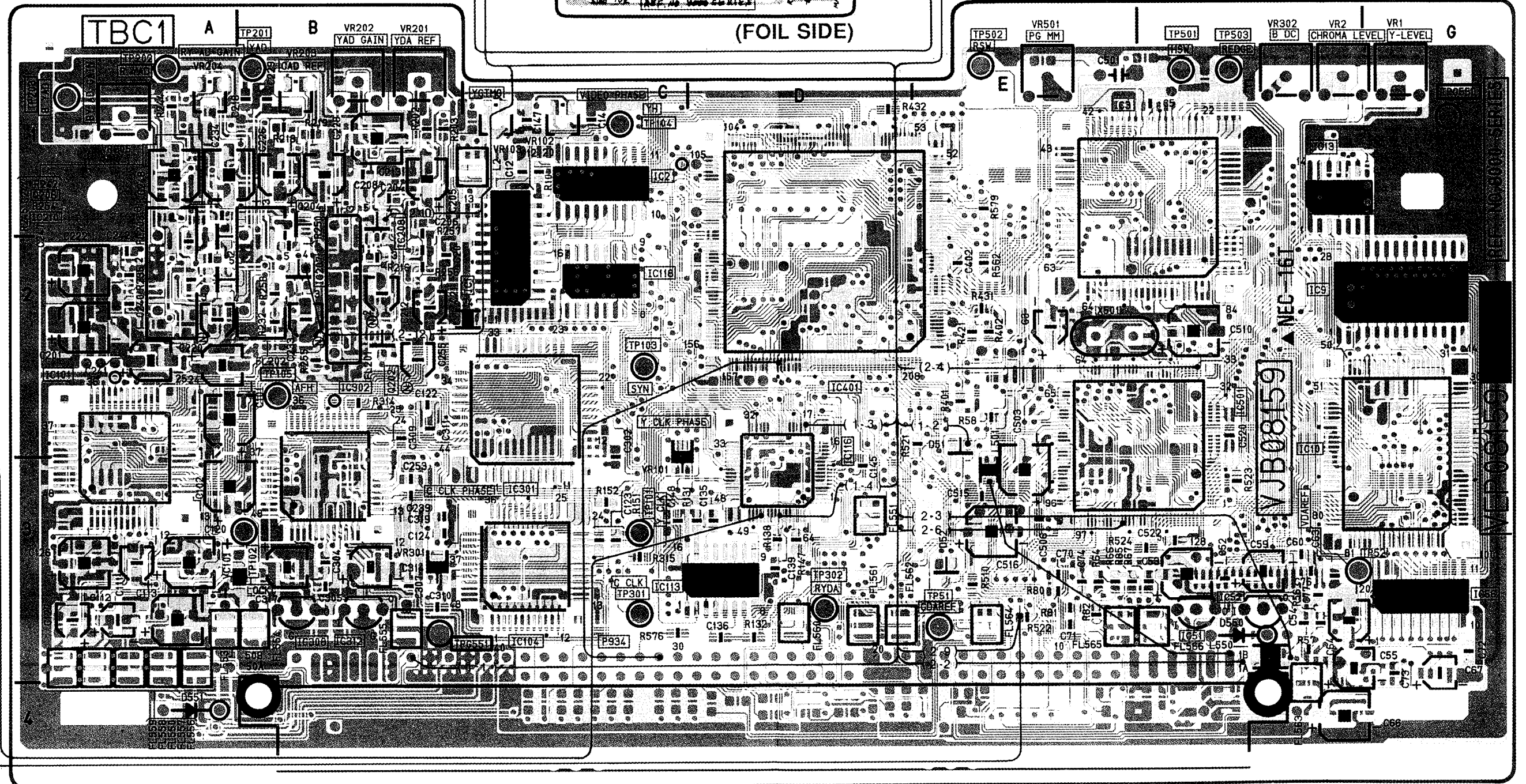


(2-12)  
(2-11)  
(2-10)  
(2-9)  
  
(2-7)  
(2-6)  
(2-5)  
(2-4)  
(2-3)  
(2-2)



—(2.5)—

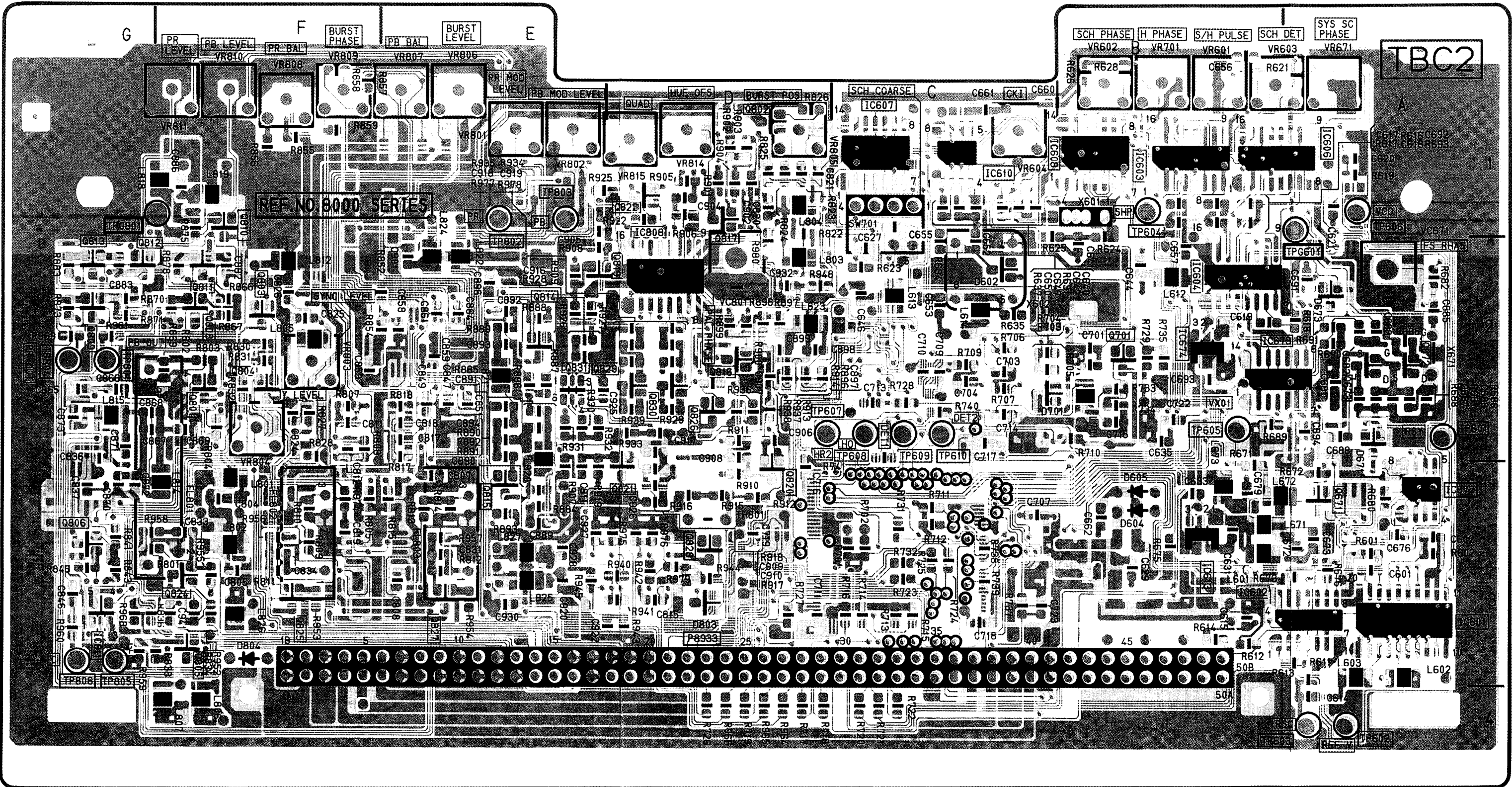




**(COMPONENT SIDE)**

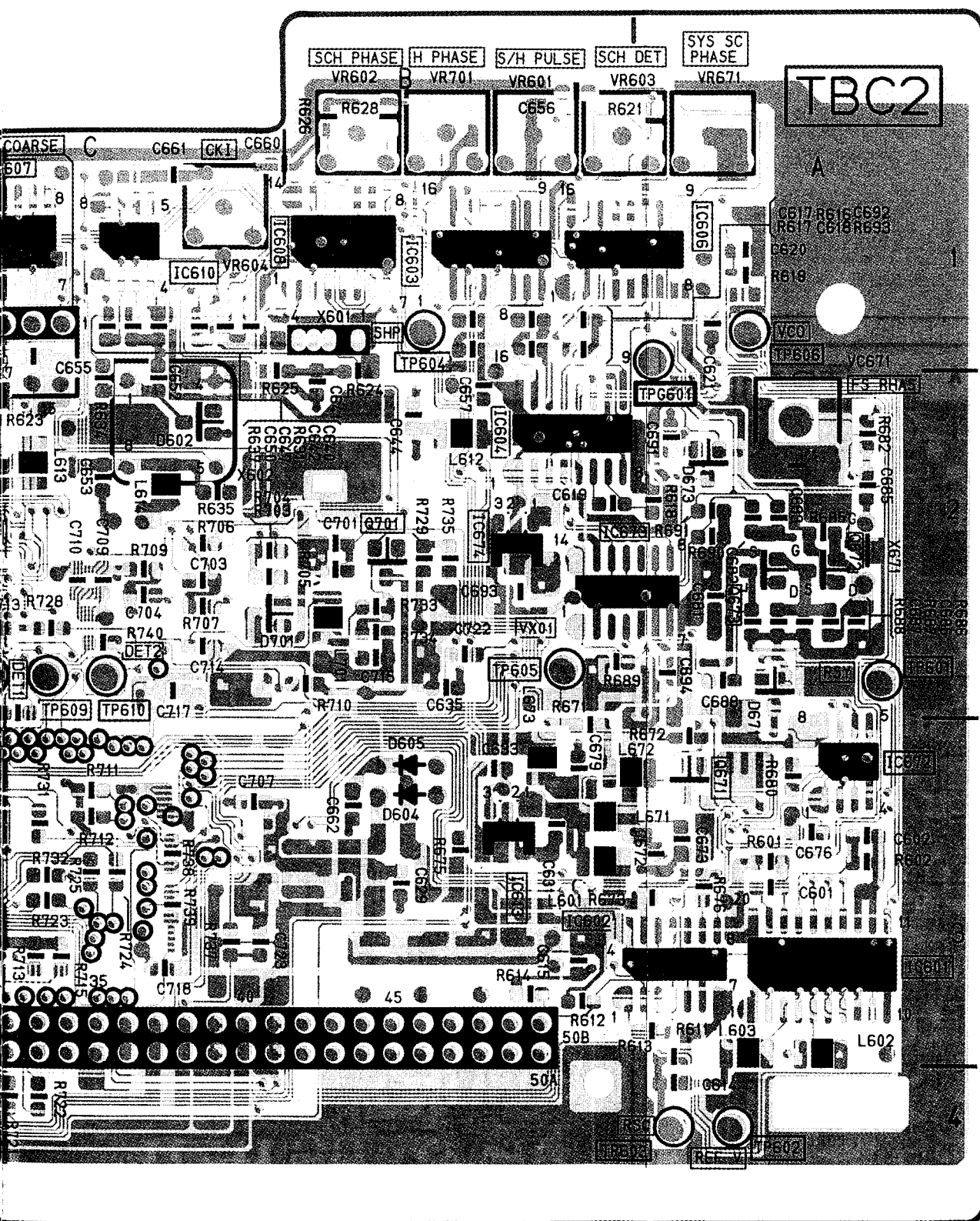


**TBC (2) C.B.A. (E12)**

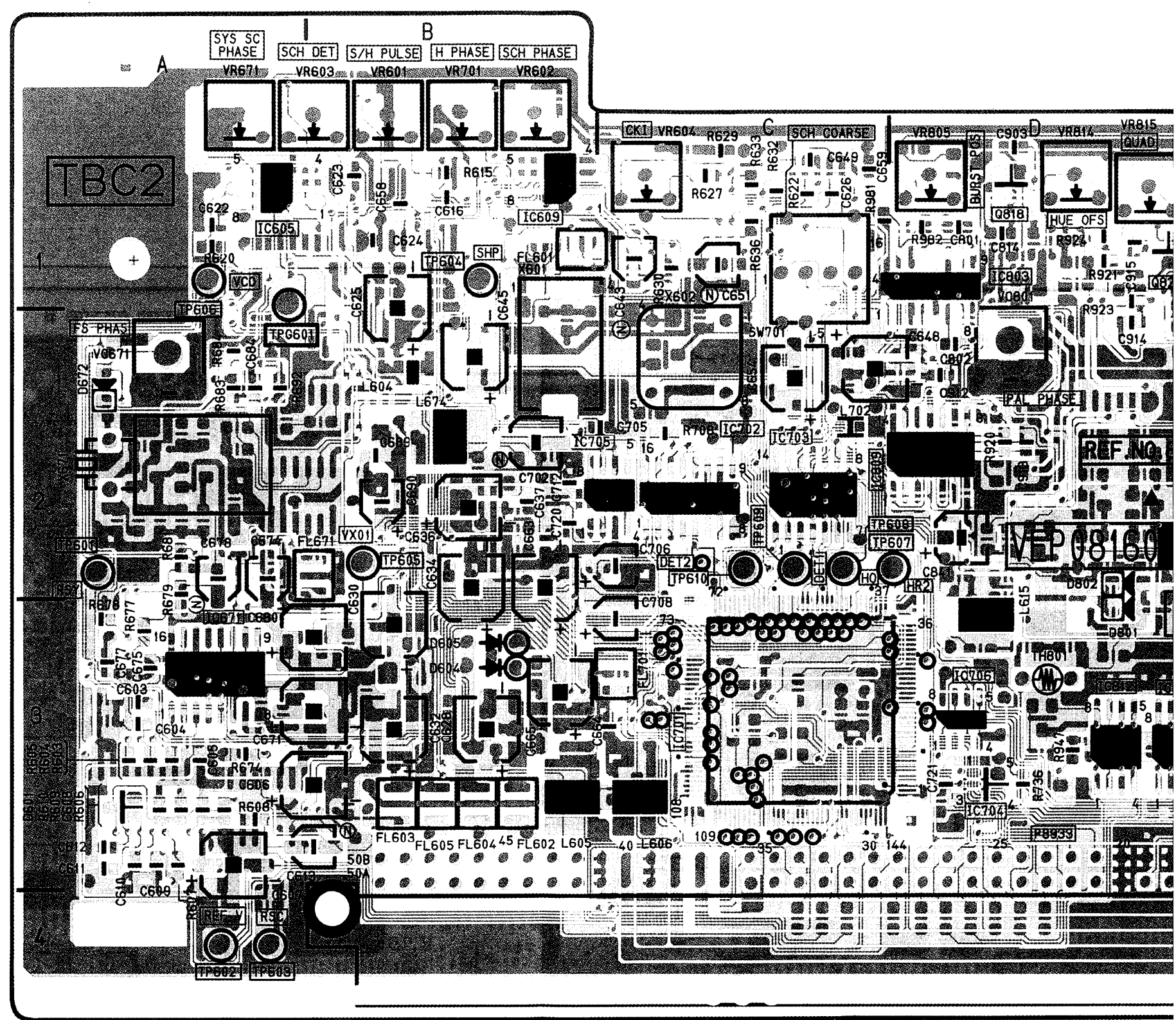


**(FOIL SIDE)**





(FOIL SIDE)







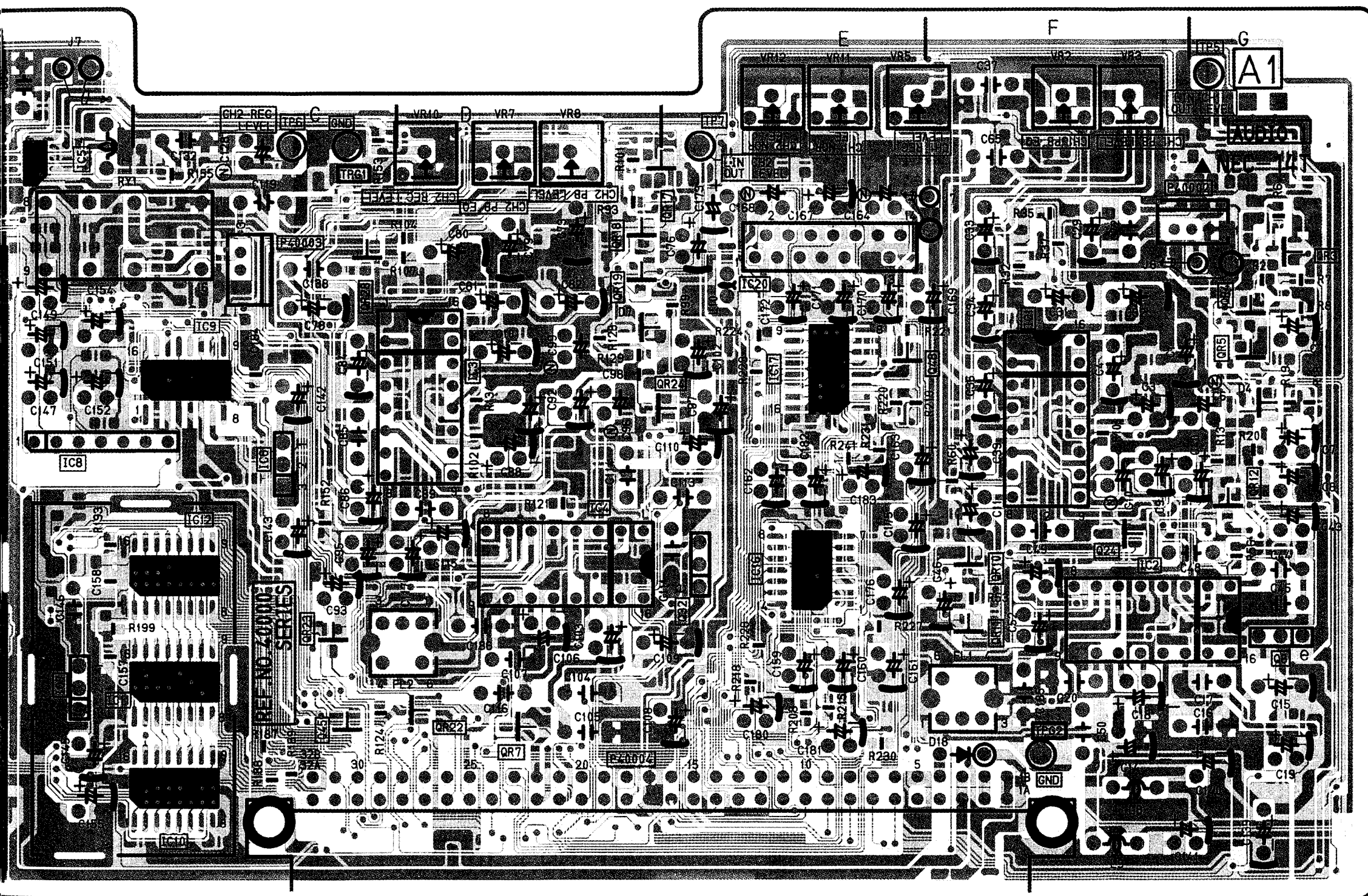


1  
2  
3





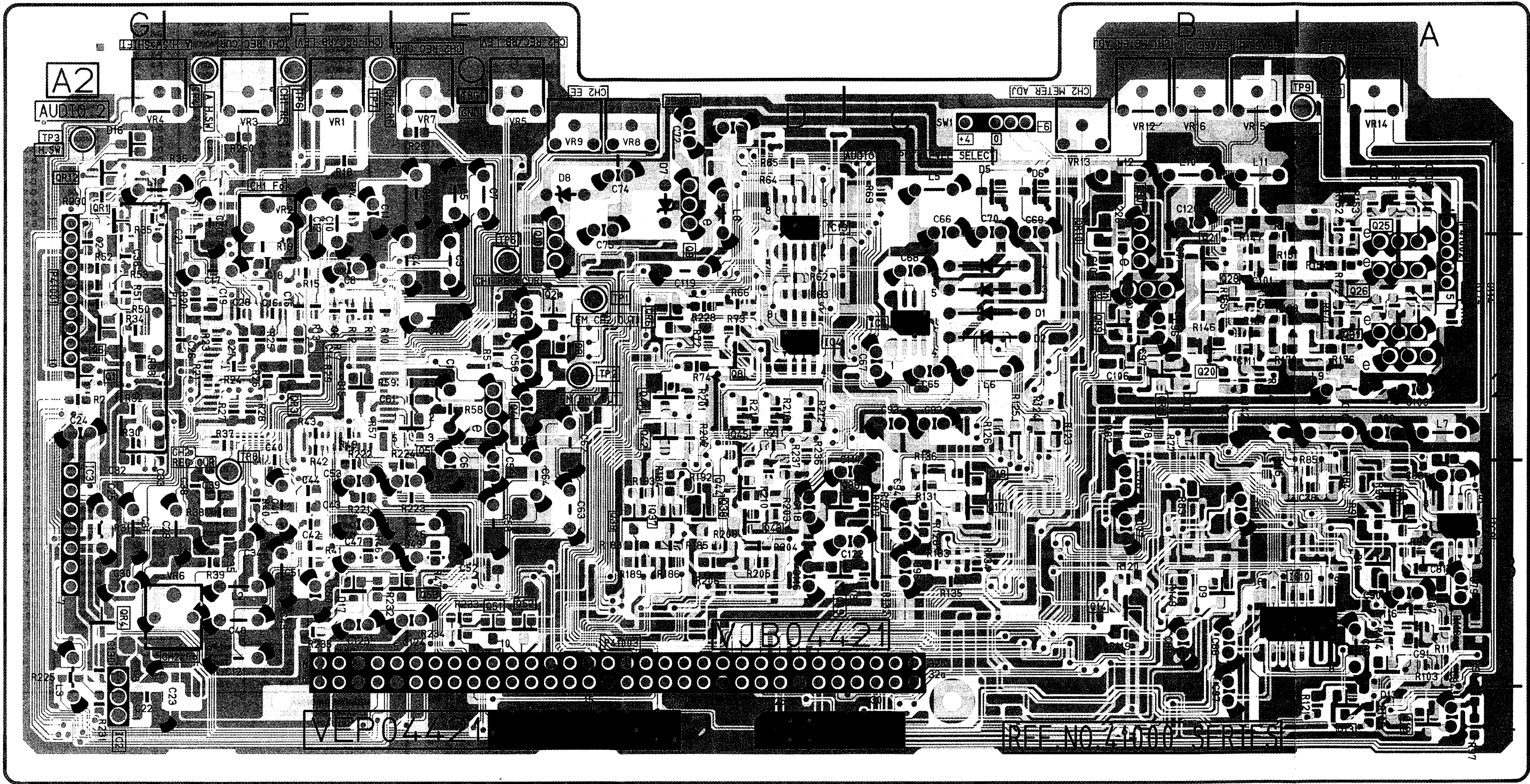




AUDIO (1) C.B.A.							
Transistor		QR40005	G-2	Ⓢ	TL40002	A-3	Ⓢ
Q40001	G-2	Ⓢ	QR40006	G-1	Ⓢ	TL40003	A-3
Q40002	G-1	Ⓢ	QR40007	D-3	Ⓢ	TL40003	A-3
Q40003	G-1	Ⓢ	QR40008	F-3	Ⓢ	TL40004	B-3
Q40004	G-1	Ⓢ	QR40009	F-3	Ⓢ	TL40004	B-3
Q40005	G-2	Ⓢ	QR40010	F-3	Ⓢ	TL40005	B-2
Q40006	G-2	Ⓢ	QR40011	F-3	Ⓢ	TL40005	B-2
Q40007	G-2	Ⓢ	QR40012	G-2	Ⓢ	TP40001	B-3
Q40008	G-3	Ⓢ	QR40013	G-1	Ⓢ	TP40001	B-3
Q40008	G-3	Ⓢ	QR40014	F-1	Ⓢ	TP40002	A-3
Q40009	A-2	Ⓢ	QR40015	E-1	Ⓢ	TP40002	A-3
Q40009	A-2	Ⓢ	QR40016	D-1	Ⓢ	TP40003	B-1
Q40010	A-2	Ⓢ	QR40017	E-1	Ⓢ	TP40003	B-1
Q40010	A-2	Ⓢ	QR40018	D-1	Ⓢ	TP40004	B-3
Q40011	A-1	Ⓢ	QR40019	D-2	Ⓢ	TP40004	B-3
Q40012	A-2	Ⓢ	QR40020	C-3	Ⓢ	TP40005	G-1
Q40013	A-2	Ⓢ	QR40021	C-3	Ⓢ	TP40005	G-1
Q40014	A-4	Ⓢ	QR40022	D-3	Ⓢ	TP40006	C-1
Q40015	A-3	Ⓢ	QR40023	C-3	Ⓢ	TP40006	C-1
Q40016	B-3	Ⓢ	QR40024	E-2	Ⓢ	TP40007	E-1
Q40017	A-3	Ⓢ	QR40025	B-2	Ⓢ	TP40007	E-1
Q40018	A-3	Ⓢ	QR40026	C-2	Ⓢ	TP40008	B-1
Q40018	A-3	Ⓢ	QR40027	C-1	Ⓢ	TP40008	B-1
Q40019	A-3	Ⓢ	QR40028	C-2	Ⓢ	TPG40001	C-1
Q40020	A-2	Ⓢ	QR40029	E-3	Ⓢ	TPG40001	C-1
Q40021	A-3	Ⓢ	QR40030	E-2	Ⓢ	TPG40002	F-3
Q40022	F-1	Ⓢ	QR40031	E-2	Ⓢ	TPG40002	F-3
Q40023	F-1	Ⓢ	QR40032	E-2	Ⓢ		
Q40024	F-3	Ⓢ	Integrated Circuit			Adjustment	
Q40025	C-2	Ⓢ				VR40002	F-1
Q40026	C-1	Ⓢ	IC40001	F-2	Ⓢ	VR40002	F-1
Q40027	D-1	Ⓢ	IC40001	F-2	Ⓢ	VR40003	F-1
Q40028	C-1	Ⓢ	IC40002	F-3	Ⓢ	VR40003	F-1
Q40029	D-2	Ⓢ	IC40002	F-3	Ⓢ	VR40004	A-1
Q40030	D-2	Ⓢ	IC40003	D-2	Ⓢ	VR40004	A-1
Q40031	E-2	Ⓢ	IC40003	D-2	Ⓢ	VR40005	E-1
Q40032	E-3	Ⓢ	IC40004	D-3	Ⓢ	VR40005	E-1
Q40032	E-3	Ⓢ	IC40004	D-3	Ⓢ	VR40007	D-1
Q40033	A-2	Ⓢ	IC40005	B-1	Ⓢ	VR40007	D-1
Q40034	A-2	Ⓢ	IC40006	C-2	Ⓢ	VR40008	D-1
Q40035	B-2	Ⓢ	IC40006	C-2	Ⓢ	VR40008	D-1
Q40035	B-2	Ⓢ	IC40007	B-3	Ⓢ	VR40009	A-1
Q40036	B-2	Ⓢ	IC40007	B-3	Ⓢ	VR40009	A-1
Q40036	B-2	Ⓢ	IC40008	B-2	Ⓢ	VR40010	D-1
Q40037	B-3	Ⓢ	IC40008	B-2	Ⓢ	VR40010	D-1
Q40038	A-3	Ⓢ	IC40008	B-2	Ⓢ	VR40011	E-1
Q40039	A-3	Ⓢ	IC40009	C-2	Ⓢ	VR40011	E-1
Q40040	B-3	Ⓢ	IC40010	C-3	Ⓢ	VR40012	E-1
Q40041	D-2	Ⓢ	IC40011	C-3	Ⓢ	VR40012	E-1
Q40042	C-2	Ⓢ	IC40012	C-3	Ⓢ		
Q40043	D-2	Ⓢ	IC40013	C-3	Ⓢ	Connector	
Q40044	B-2	Ⓢ	IC40014	C-3	Ⓢ		
Q40045	C-3	Ⓢ	IC40015	C-3	Ⓢ	P40001	A-1
Q40046	C-2	Ⓢ	IC40016	E-3	Ⓢ	P40001	A-1
Q40047	E-2	Ⓢ	IC40017	E-2	Ⓢ	P40002	F-1
Q40048	E-2	Ⓢ	IC40018	E-2	Ⓢ	P40002	G-1
Q40049	B-3	Ⓢ	IC40019	E-3	Ⓢ	P40003	C-1
Q40049	B-3	Ⓢ	IC40020	E-1	Ⓢ	P40003	C-1
			IC40020	E-1	Ⓢ	P40004	D-3
			IC40021	B-2	Ⓢ	P40004	E-3
Transistor & Resistor							
QR40001	G-2	Ⓢ	Test Point				
QR40002	G-2	Ⓢ	TL40001	A-2	Ⓢ		
QR40003	G-1	Ⓢ	TL40001	A-2	Ⓢ		
QR40004	G-2	Ⓢ	TL40002	A-3	Ⓢ		

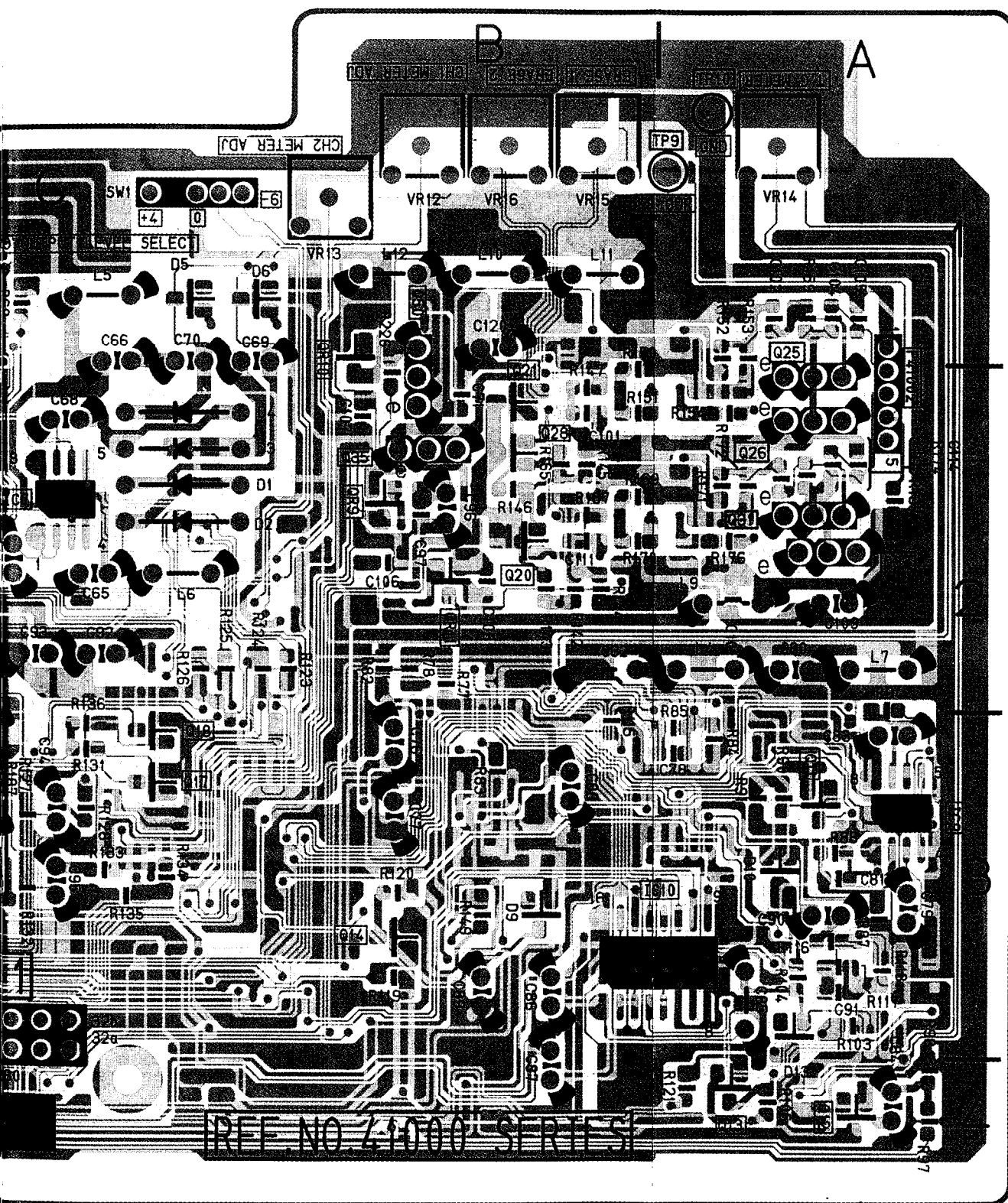


AUDIO (2) C.B.A. (E8)

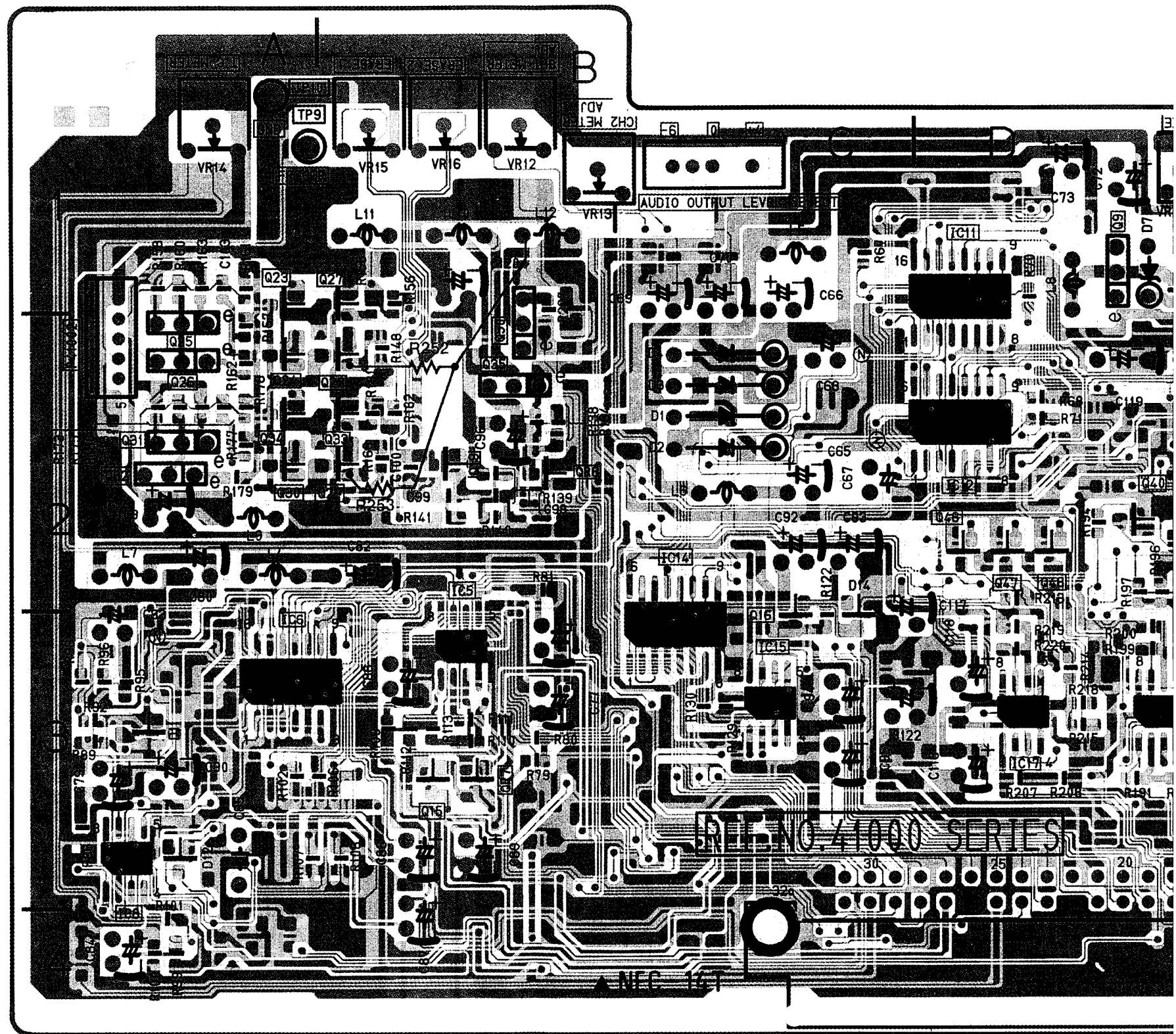


(FOIL SIDE)

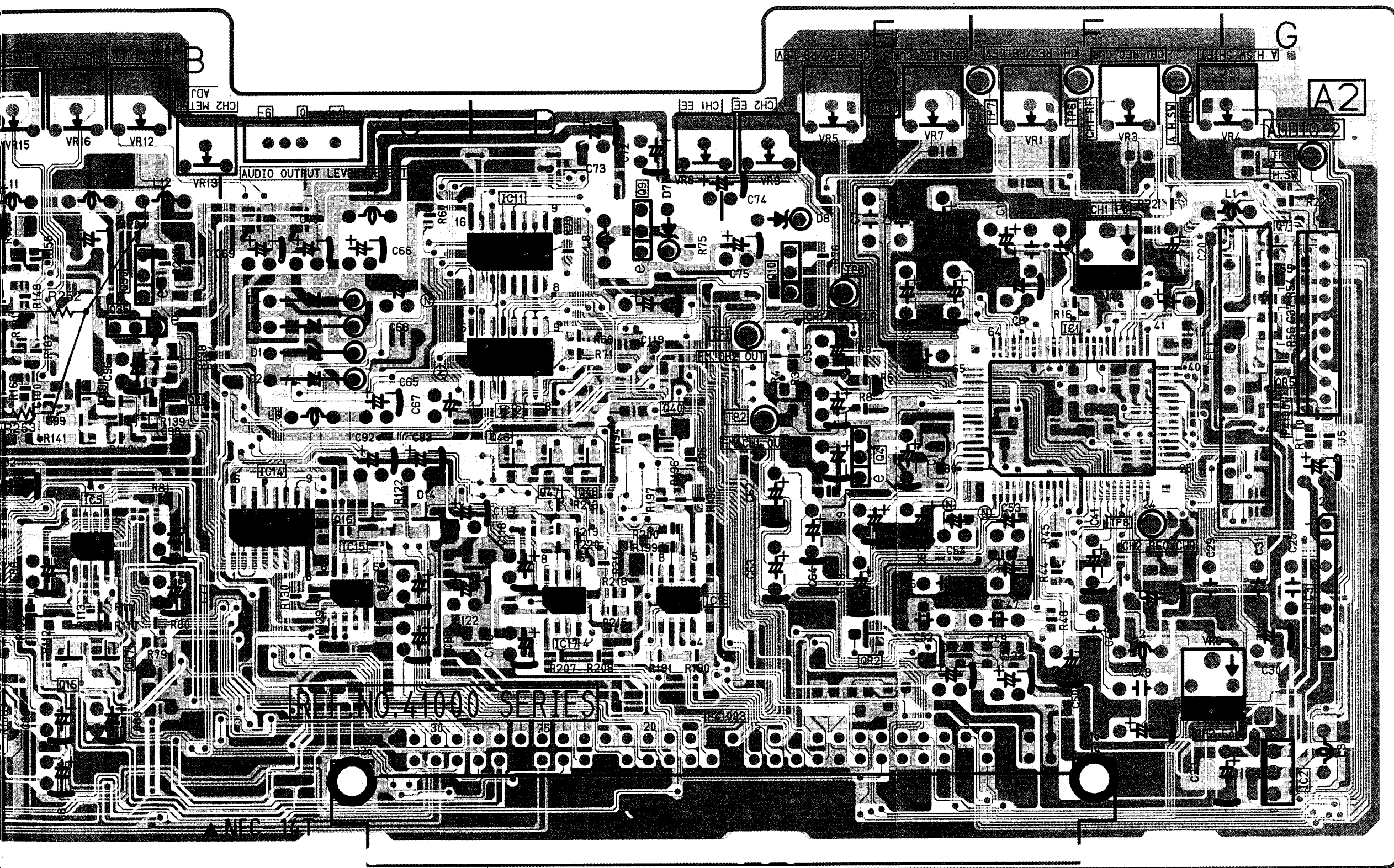




(FOIL SIDE)







(COMPONENT SIDE)

AUDIO (2) C.B.A.				
Transistor				
Q41001	G-2	IC41002	G-4	Ⓢ
Q41002	E-2	IC41003	G-3	Ⓢ
Q41003	E-2	IC41004	G-3	Ⓢ
Q41004	F-2	IC41005	D-2	Ⓢ
Q41005	E-2	IC41006	B-3	Ⓢ
Q41006	E-2	IC41007	A-3	Ⓢ
Q41007	G-2	IC41008	C-2	Ⓢ
Q41008	G-1	IC41009	A-3	Ⓢ
Q41009	D-2	IC41010	A-3	Ⓢ
Q41010	D-1	IC41011	D-1	Ⓢ
Q41011	D-1	IC41012	D-2	Ⓢ
Q41012	E-2	IC41013	D-1	Ⓢ
Q41013	E-2	IC41014	C-3	Ⓢ
Q41014	A-3	IC41015	C-3	Ⓢ
Q41015	A-4	IC41016	D-3	Ⓢ
Q41016	A-4	IC41017	D-3	Ⓢ
Q41017	B-3	Test Point		
Q41018	B-3	TP41001	E-2	Ⓢ
Q41019	C-3	TP41002	E-2	Ⓢ
Q41020	C-3	TP41003	E-2	Ⓢ
Q41021	B-2	TP41004	G-1	Ⓢ
Q41022	B-2	TP41005	G-1	Ⓢ
Q41023	A-1	TP41006	F-1	Ⓢ
Q41024	A-2	TP41007	F-1	Ⓢ
Q41025	A-2	TP41008	F-1	Ⓢ
Q41026	A-2	TP41009	F-3	Ⓢ
Q41027	A-2	TP41010	F-3	Ⓢ
Q41028	B-1	TP41011	A-1	Ⓢ
Q41029	B-2	TP41012	A-1	Ⓢ
Q41030	B-2	TP41013	A-1	Ⓢ
Q41031	A-2	TP41014	A-1	Ⓢ
Q41032	A-2	TP41015	E-1	Ⓢ
Q41033	A-2	TP41016	E-1	Ⓢ
Q41034	B-2	Adjustment		
Q41035	B-2	VR41001	F-1	Ⓢ
Q41036	B-2	VR41002	F-1	Ⓢ
Q41037	D-3	VR41003	F-1	Ⓢ
Q41038	D-3	VR41004	F-1	Ⓢ
Q41039	D-3	VR41005	F-1	Ⓢ
Q41040	D-2	VR41006	E-1	Ⓢ
Q41041	D-2	VR41007	E-1	Ⓢ
Q41042	D-2	VR41008	E-1	Ⓢ
Q41043	D-3	VR41009	D-1	Ⓢ
Q41044	D-3	VR41010	D-1	Ⓢ
Q41045	D-2	VR41011	D-1	Ⓢ
Q41046	D-2	VR41012	D-1	Ⓢ
Q41047	D-2	VR41013	D-1	Ⓢ
Q41048	D-3	VR41014	D-1	Ⓢ
Q41049	B-2	VR41015	D-1	Ⓢ
Q41050	B-2	VR41016	D-1	Ⓢ
Q41051	B-1	VR41017	D-1	Ⓢ
Q41052	E-3	VR41018	D-1	Ⓢ
Q41053	E-3	VR41019	D-1	Ⓢ
Transistor & Resistor				
QR41001	G-1	VR41001	F-1	Ⓢ
QR41002	E-3	VR41002	F-1	Ⓢ
QR41004	G-3	VR41003	F-1	Ⓢ
QR41005	G-2	VR41004	F-1	Ⓢ
QR41006	D-2	VR41005	F-1	Ⓢ
QR41007	B-3	VR41006	E-1	Ⓢ
QR41008	B-2	VR41007	E-1	Ⓢ
QR41009	B-2	VR41008	D-1	Ⓢ
QR41010	B-1	VR41009	D-1	Ⓢ
QR41011	B-2	VR41010	D-1	Ⓢ
QR41012	G-1	VR41011	D-1	Ⓢ
Integrated Circuit				
IC41001	F-2	VR41012	D-1	Ⓢ
IC41002	G-4	VR41013	D-1	Ⓢ
		Connector		
		P41001	G-2	Ⓢ
		P41002	D-3	Ⓢ
		P41003	A-2	Ⓢ
		P41004	A-2	Ⓢ
		P41005	D-3	Ⓢ
		P41006	D-3	Ⓢ

ADDRESS INFORMATION  
Ⓢ...COMPONENT SIDE  
Ⓢ...FOIL SIDE

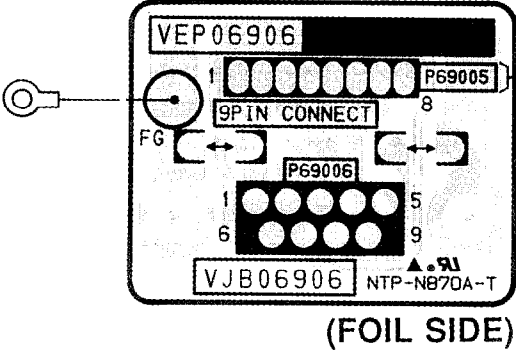


INTERFACE C.B.A. (E9), TIME CODE C.B.A. (E10) AND 9 PIN CONNECT C.B.A. (E33)

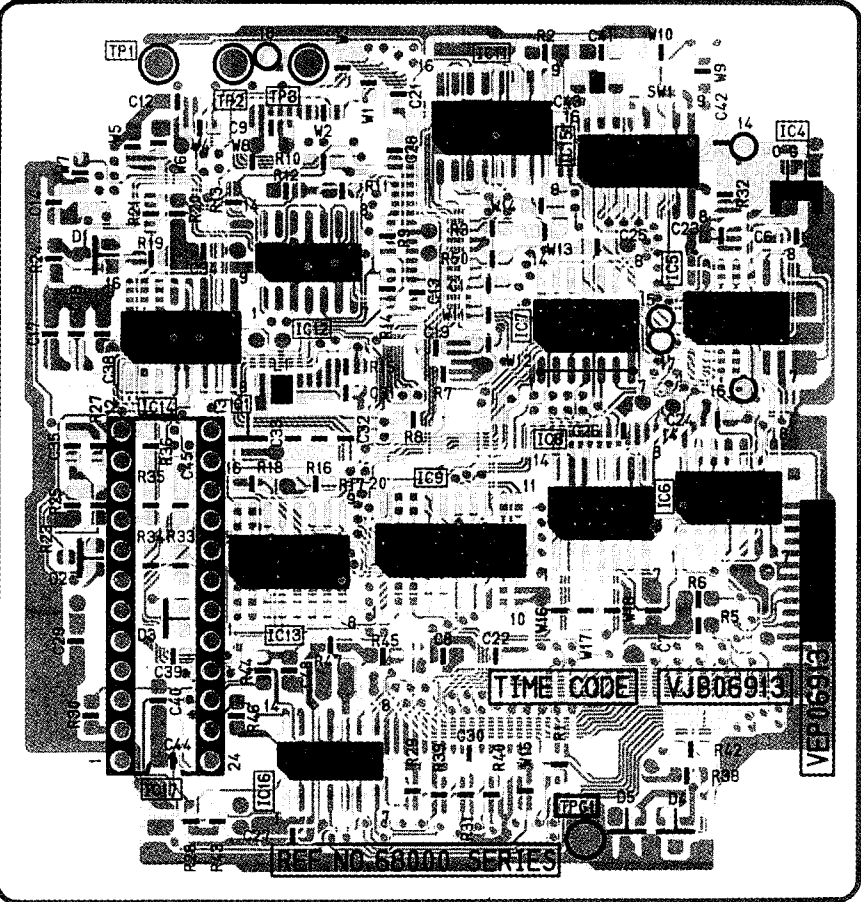
9 PIN CONNECT C.B.A.	
Connector	
P69005	C-2
P69006	C-2

ADDRESS INFORMATION

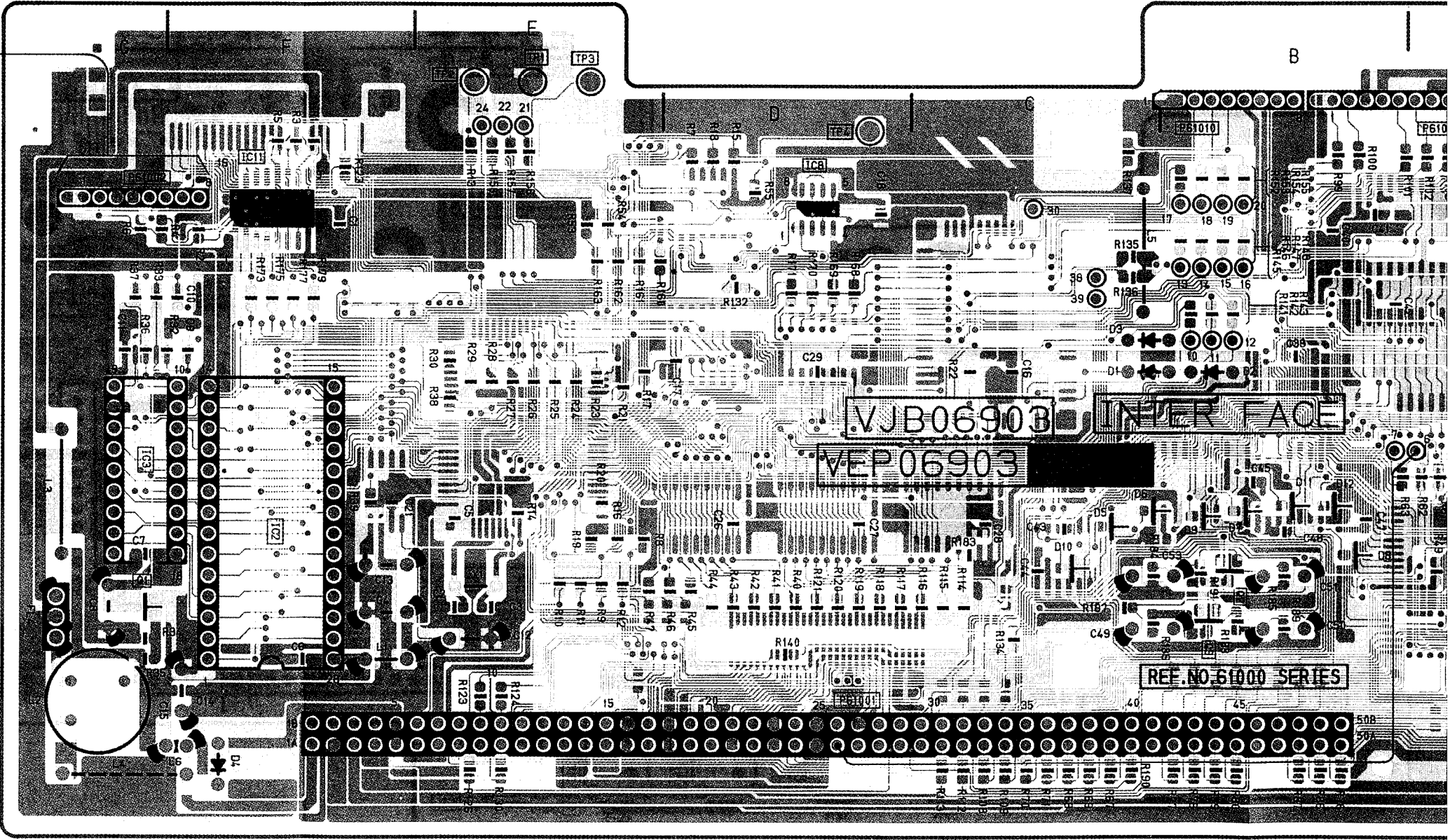
9 PIN CONNECT C.B.A. (E33) INTERFACE C.B.A. (E9)



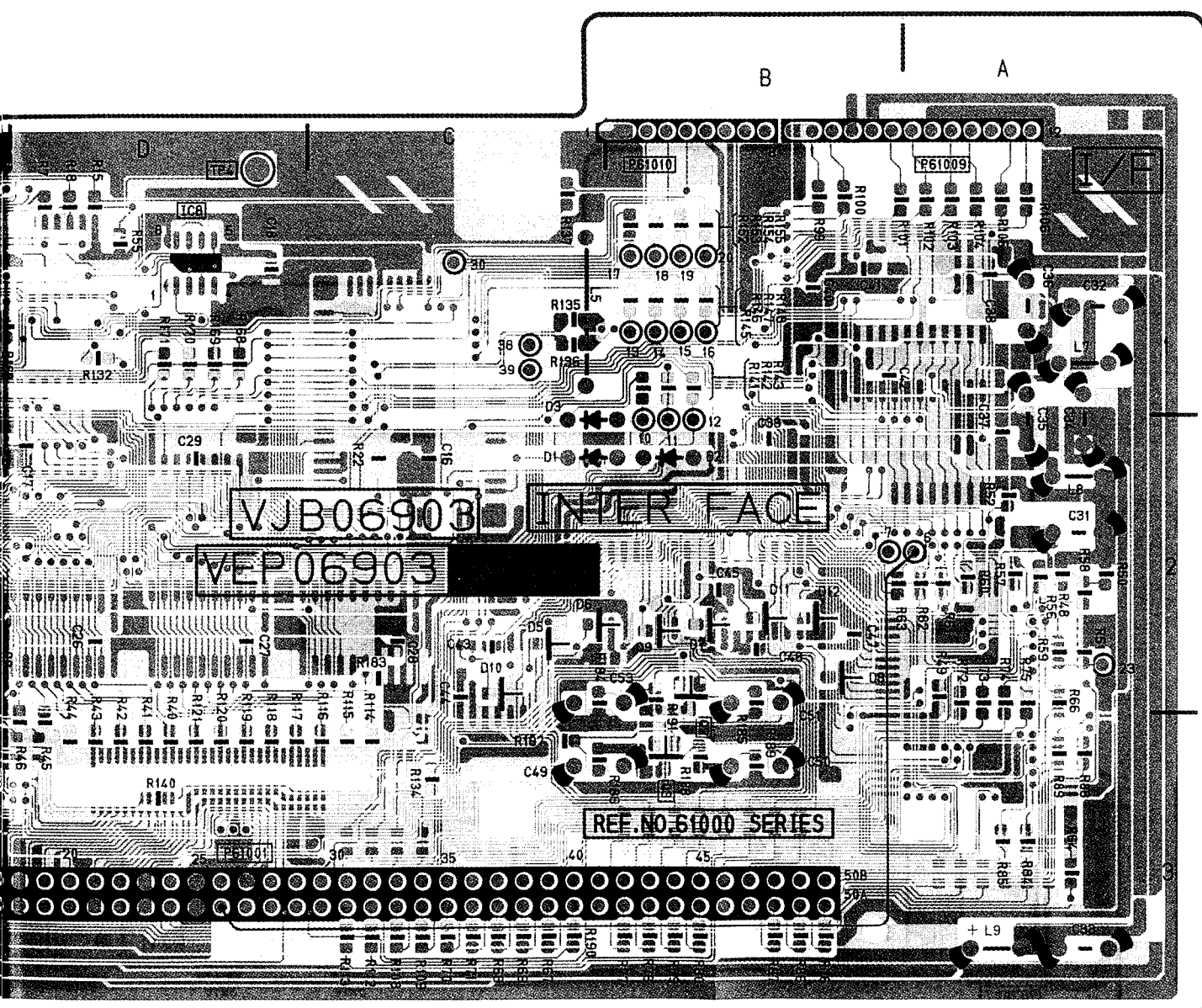
TIME CODE C.B.A. (E10)



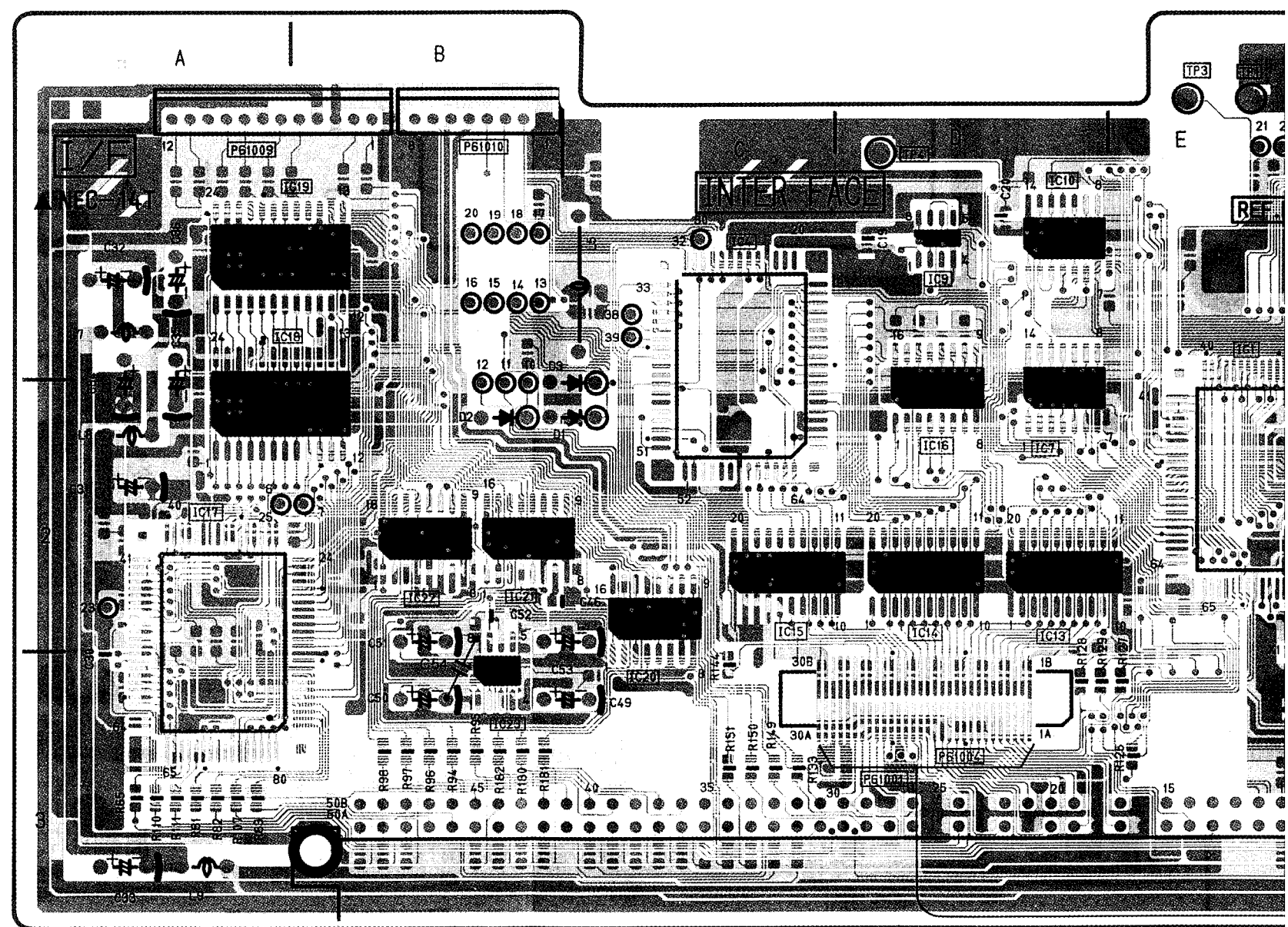
(FOIL SIDE)







(FOIL SIDE)



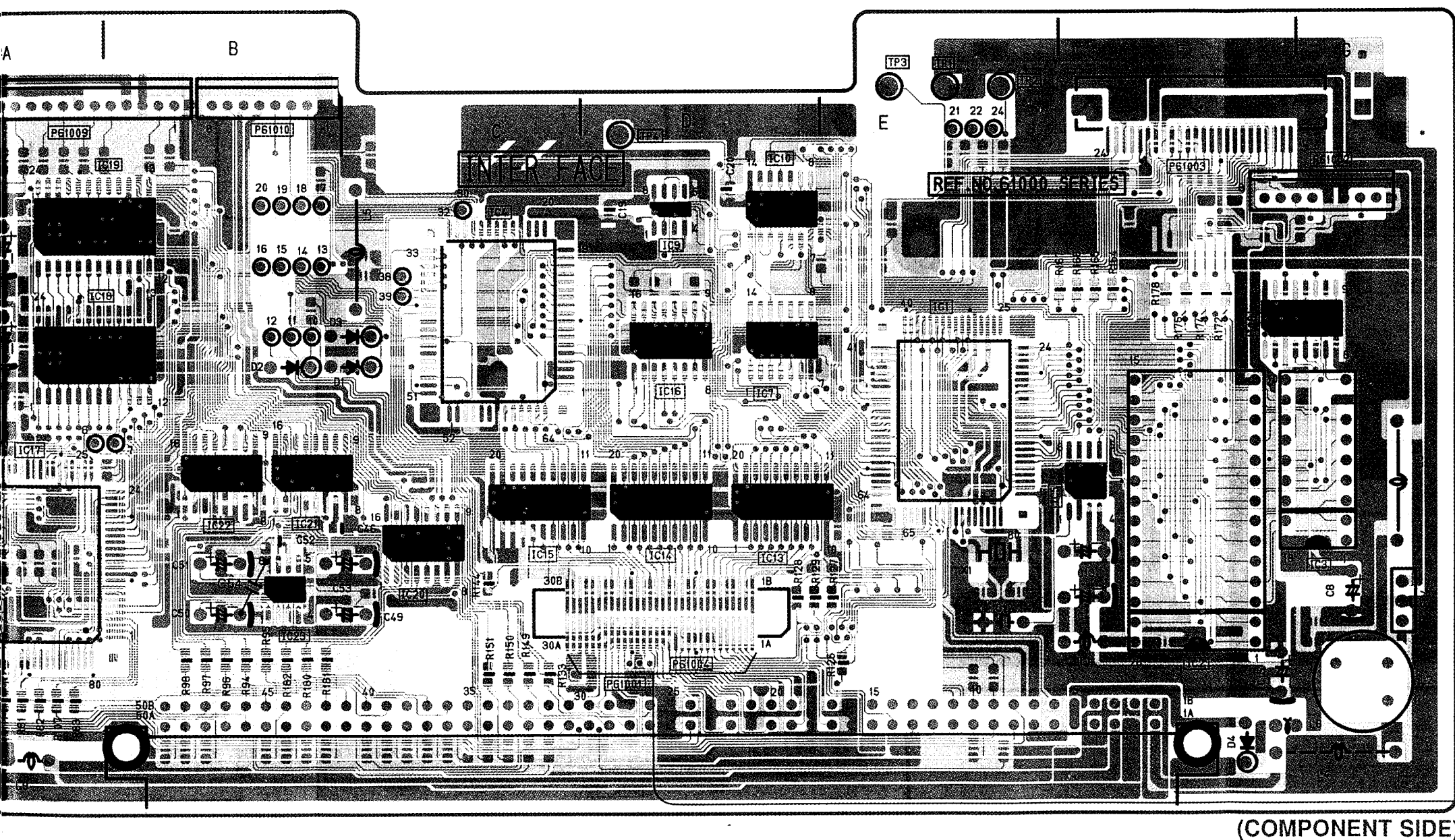


INTERFACE C.B.A.					
Transistor		IC61011	C-3	TP61003	C-4
Q61001	B-3	IC61013	B-11	TP61003	C-11
Q61002	B-6	IC61014	B-10	TP61004	C-5
Q61003	B-6	IC61015	B-10	TP61004	C-10
Integrated Circuit		IC61016	B-10	Connector	
IC61001	B-11	IC61017	B-8	P61001	A-5
IC61002	B-3	IC61018	B-9	P61001	A-10
IC61002	B-12	IC61019	C-9	P61002	C-3
IC61003	B-3	IC61020	B-10	P61002	C-12
IC61003	B-12	IC61021	B-9	P61003	C-12
IC61004	C-10	IC61022	B-9	P61004	A-10
IC61005	B-12	IC61023	B-9	P61009	C-7
IC61006	B-12	Test Point		P61009	C-9
IC61007	B-11	TP61001	C-4	P61010	C-6
IC61008	C-5	TP61001	C-11	P61010	C-9
IC61009	C-10	TP61002	C-4		
IC61010	C-11	TP61002	C-11		

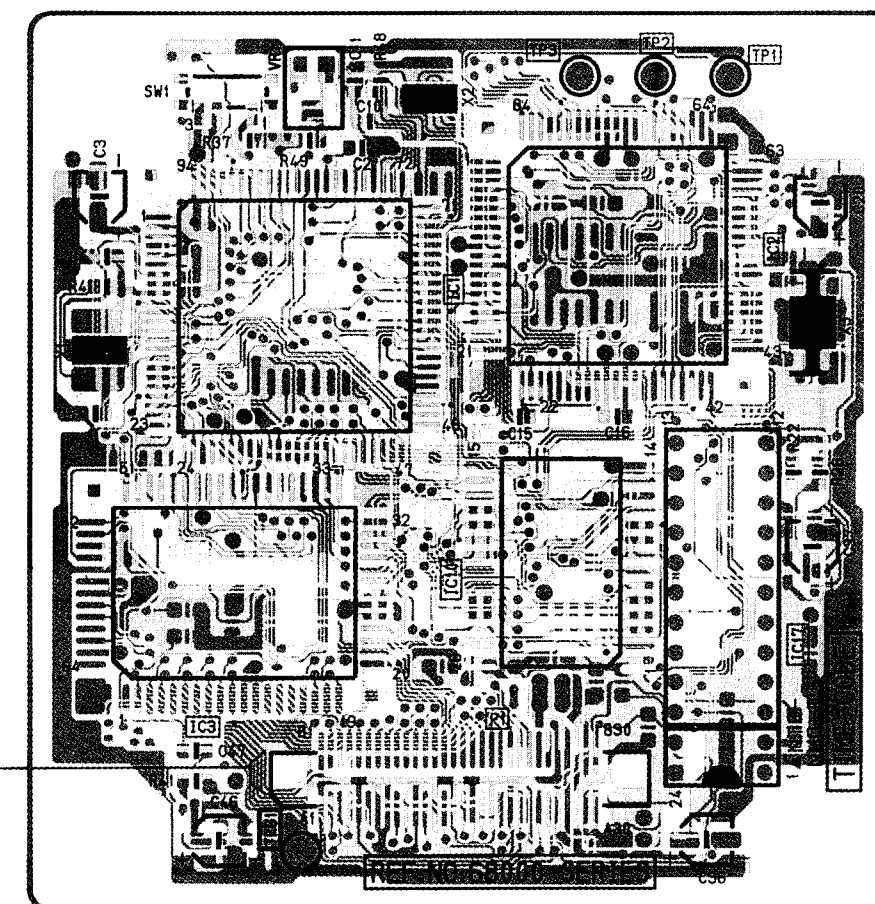
ADDRESS INFORMATION

TIME CODE C.B.A.				
Transistor		IC68016	A-1	
Q68001	B-1	IC68017	A-1	
		IC68017	A-14	
Integrated Circuit		Test Point		
IC68001	B-14	TP68001	B-1	
IC68002	B-14	TP68001	B-14	
IC68003	A-13	TP68002	B-1	
IC68004	B-2	TP68002	B-14	
IC68005	B-2	TP68003	B-1	
IC68006	A-2	TP68003	B-14	
IC68007	B-2	TPG68001	A-2	
IC68008	A-2	Adjustment		
IC68009	A-2	VR68001	B-14	
IC68010	A-14	Connector		
IC68011	B-2	P68001	A-14	
IC68012	B-1			
IC68013	A-1			
IC68014	B-1			
IC68015	B-2			

ADDRESS INFORMATION



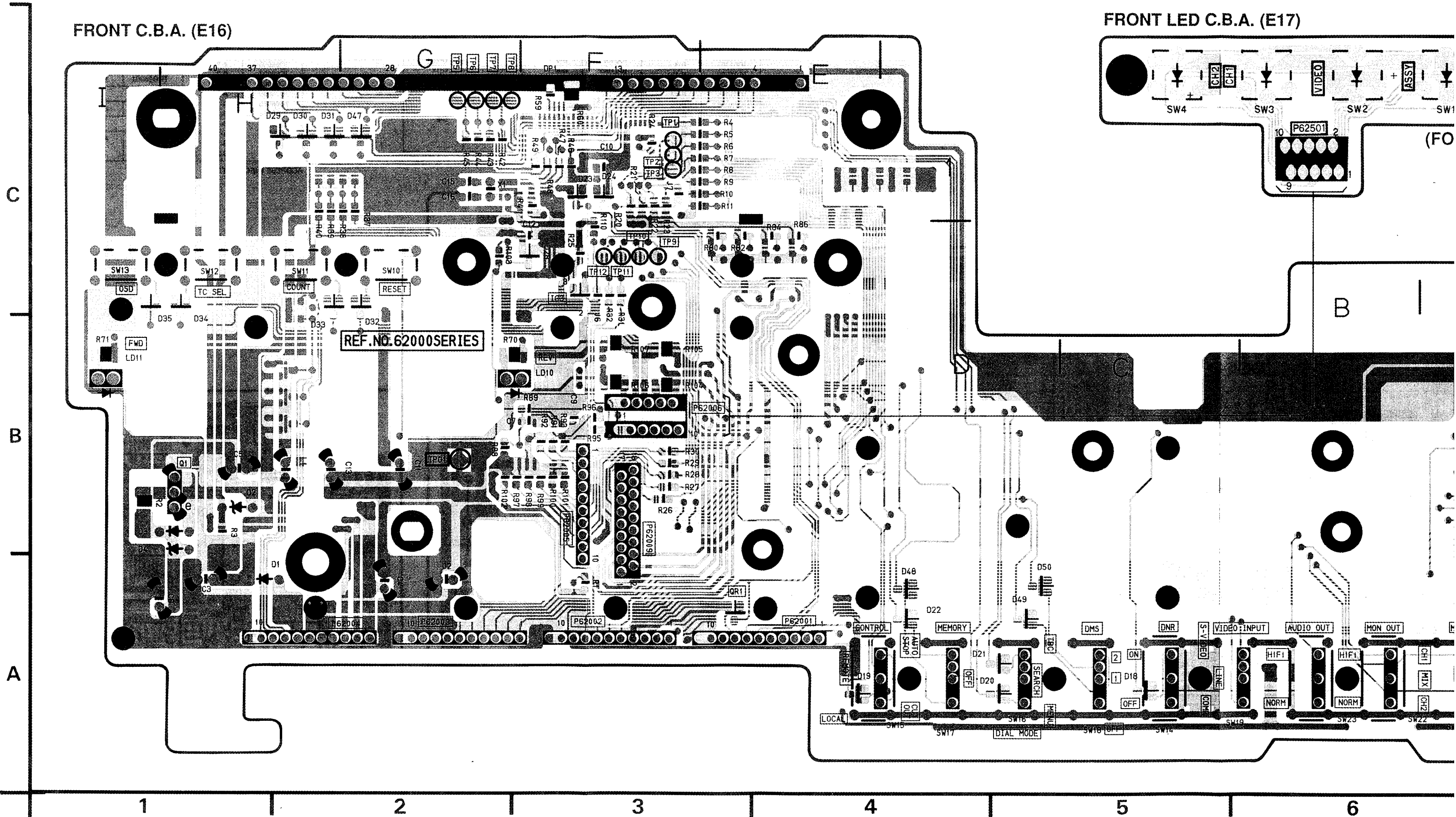
(COMPONENT SIDE)



(COMPONENT SIDE)

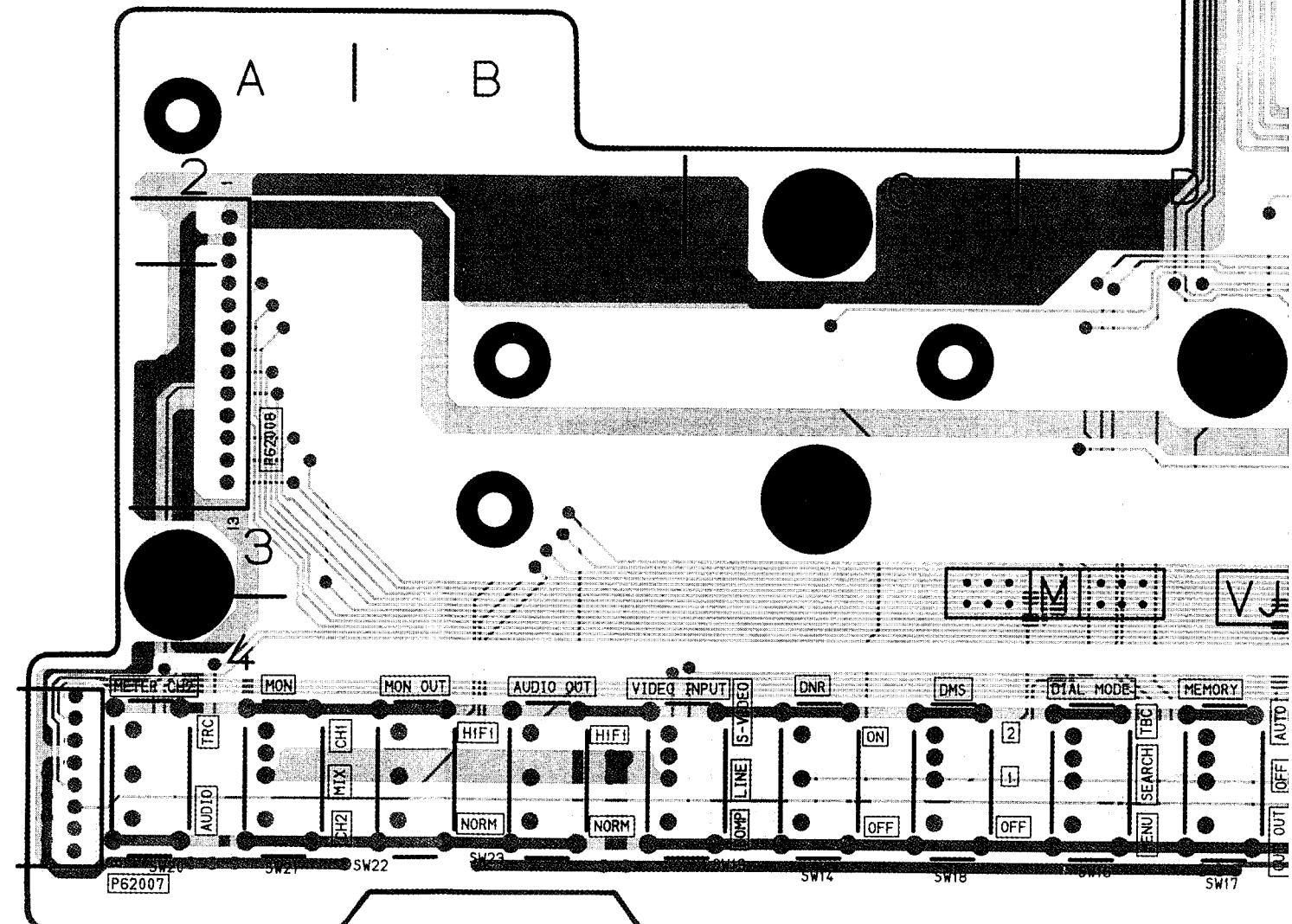
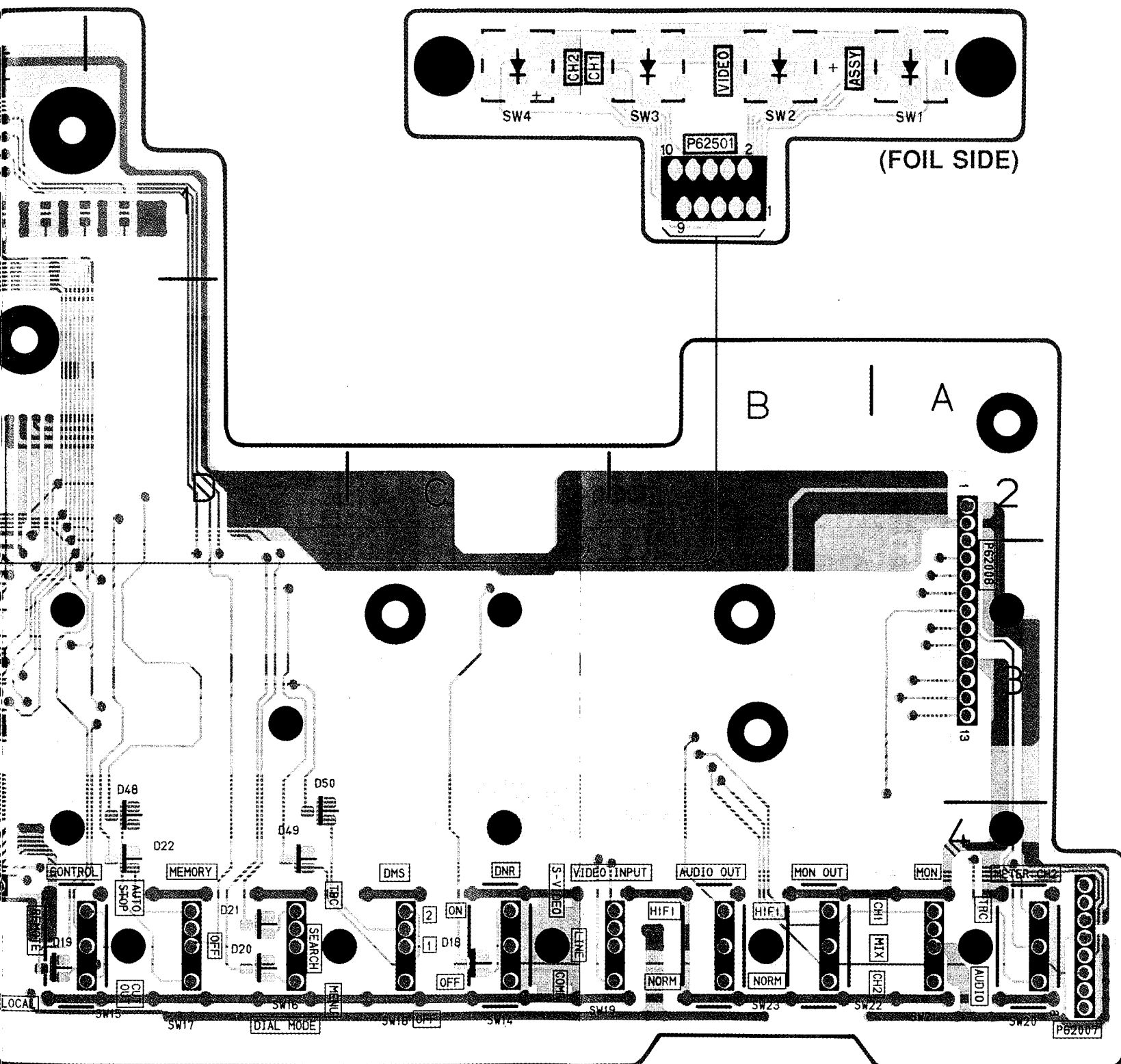
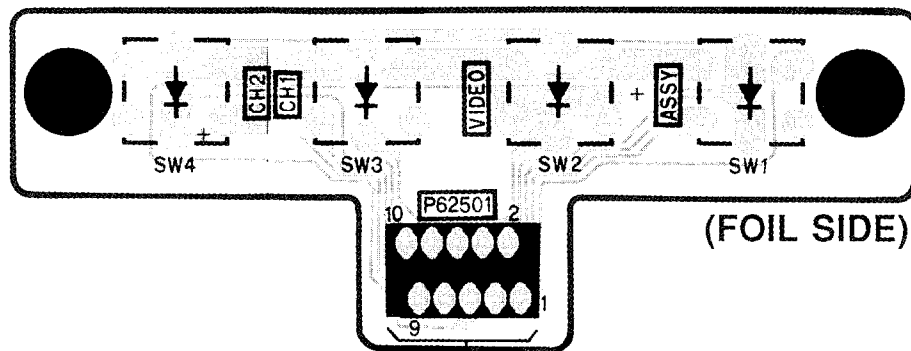


FRONT C.B.A. (E16) AND FRONT LED C.B.A. (E17)





FRONT LED C.B.A. (E17)



4

5

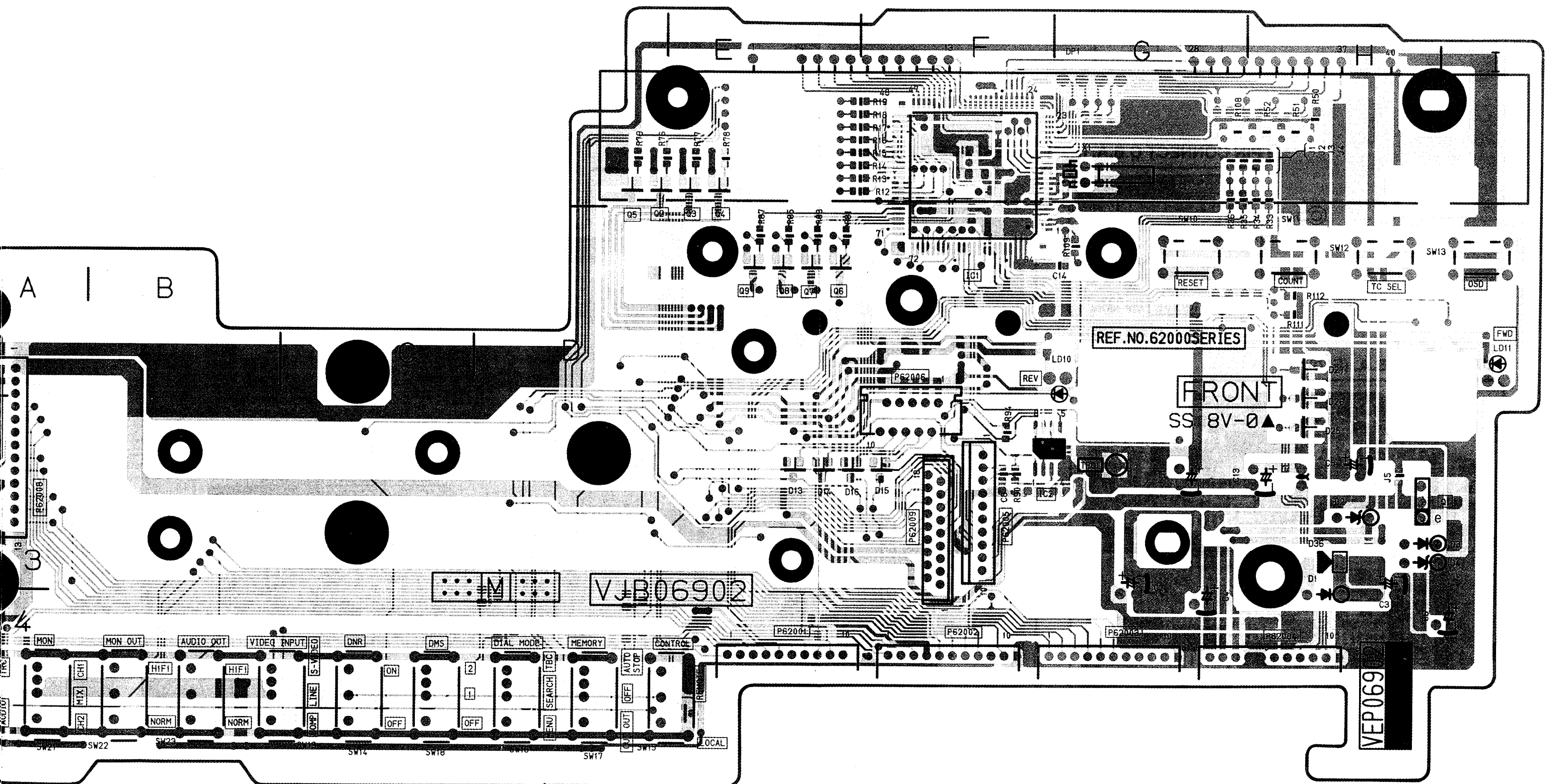
6

7

8

9





NT SIDE)

8

9

10

11

12

13



KEYBOARD C.B.A. (E18)

FRONT C.B.A.	
Transistor	
Q62001	B-1
Q62001	B-13
Q62002	C-10
Q62003	C-10
Q62004	C-10
Q62005	C-10
Q62006	C-11
Q62007	C-11
Q62008	C-11
Q62009	C-10
Transistor & Resistor	
QR62001	A-3
Integrated Circuit	
IC62001	C-11
IC62002	B-12
IC62003	C-3
Test Point	
TP62001	C-3
TP62002	C-3
TP62003	C-3
TP62005	C-2
TP62006	C-2
TP62007	C-2
TP62008	C-2
TP62009	C-3
TP62010	C-3
TP62011	C-3
TP62012	C-3
TPG62001	B-2
TPG62001	B-12
Connector	
P62001	A-4
P62001	A-11
P62002	A-3
P62002	A-11
P62003	A-2
P62003	A-12
P62004	A-2
P62004	A-13
P62005	B-3
P62005	B-11
P62006	B-3
P62006	B-11
P62007	A-7
P62007	A-7
P62008	B-7
P62008	B-8
P62009	B-3
P62009	B-11

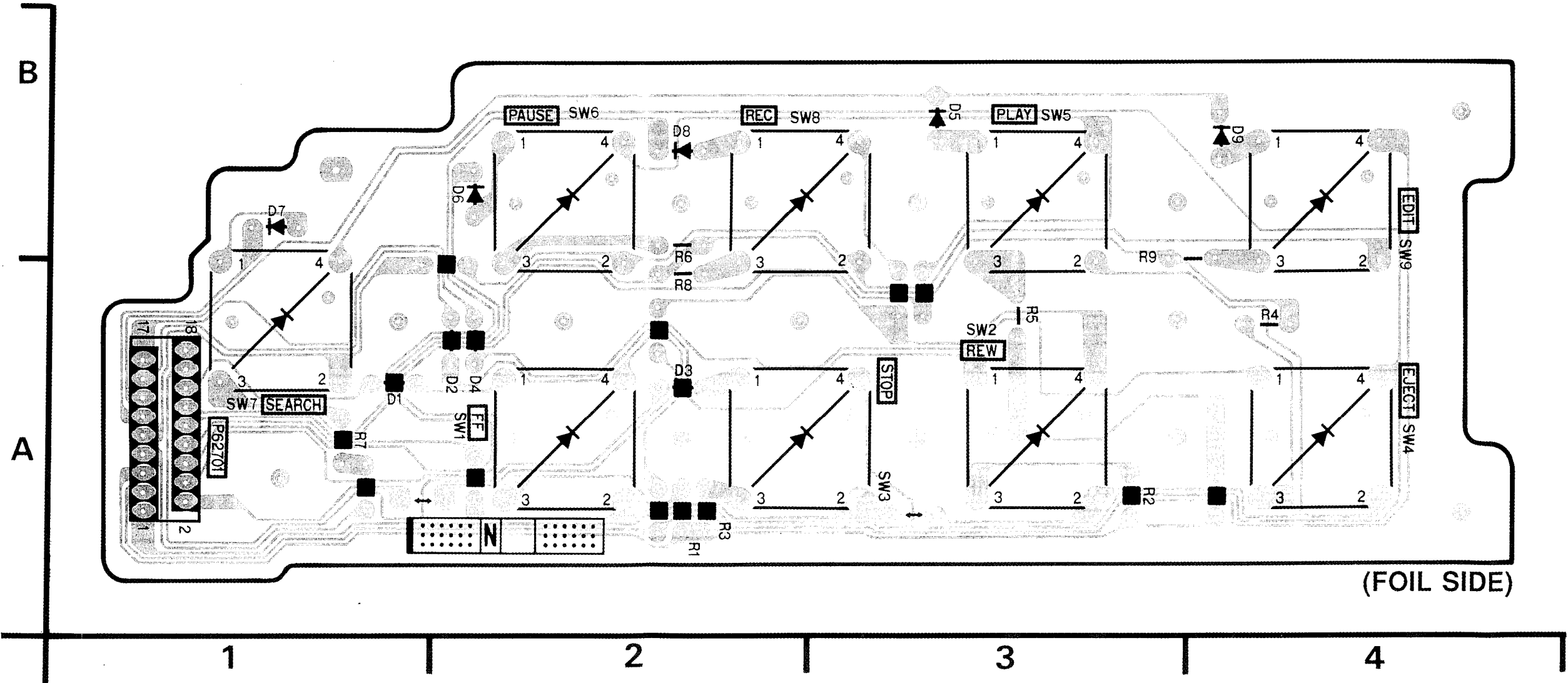
ADDRESS INFORMATION

FRONT LED C.B.A.	
Connector	
P62501	C-6

ADDRESS INFORMATION

KEYBOARD C.B.A.	
Connector	
P62701	A-1

ADDRESS INFORMATION

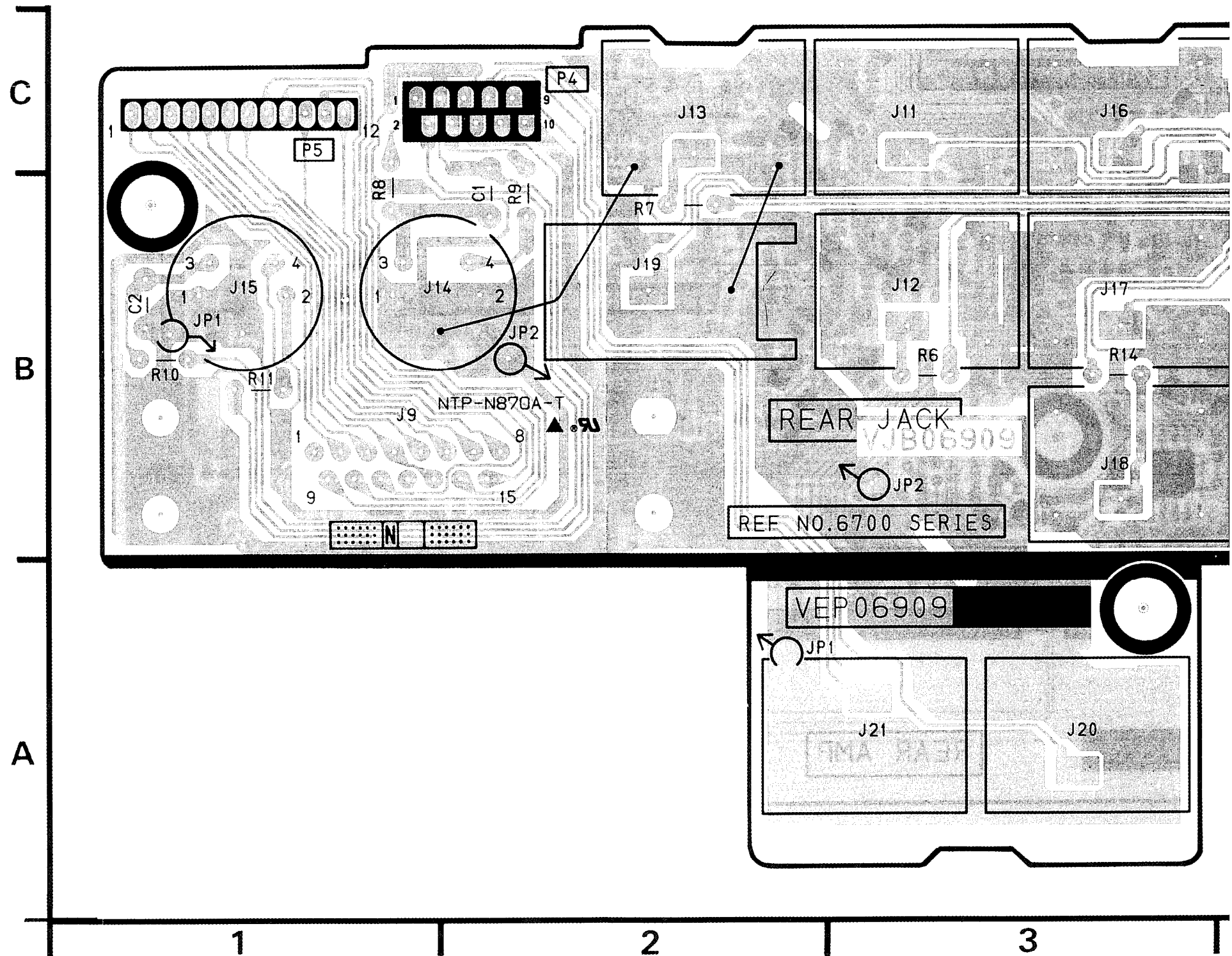
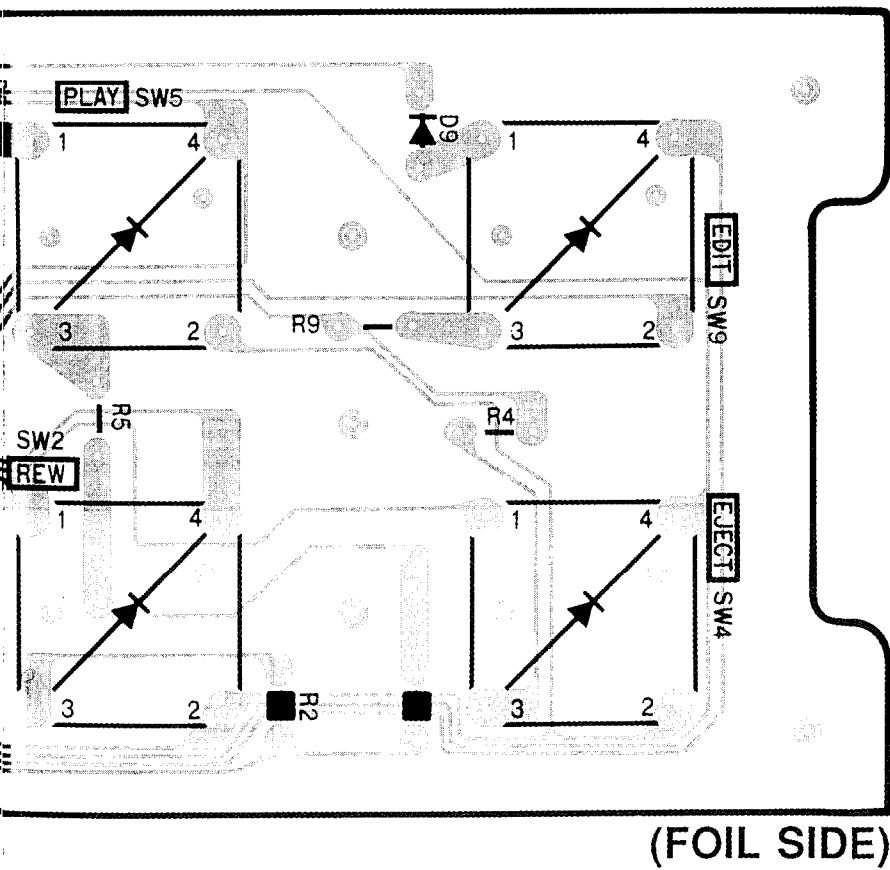




### REAR JACK C.B.A. (E29)

<b>KEYBOARD C.B.A.</b>	
<b>Connector</b>	
P62701	A-1

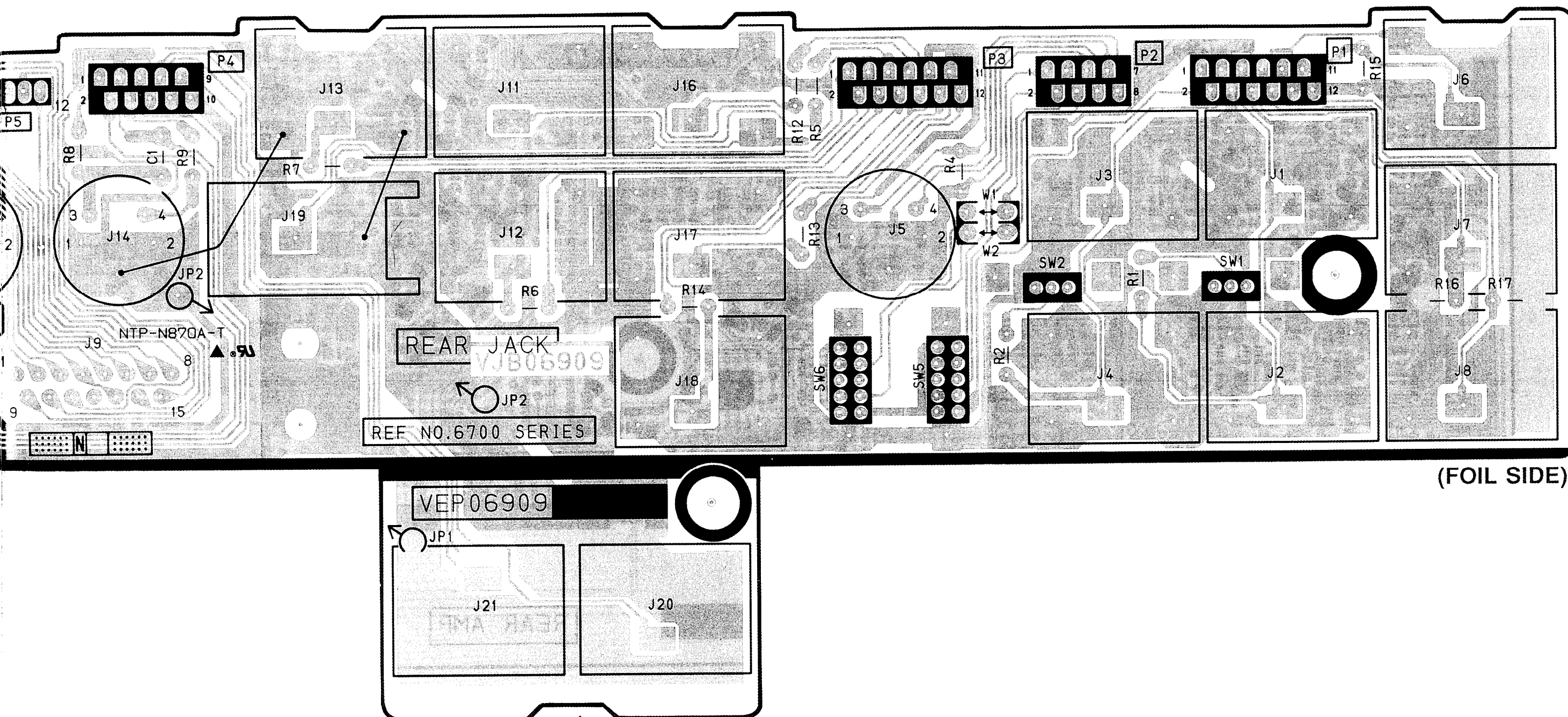
### ADDRESS INFORMATION





REAR JACK C.B.A.	
Connector	
P6701	C-5
P6702	C-4
P6703	C-4
P6704	C-2
P6705	C-1

ADDRESS INFORMATION



2

3

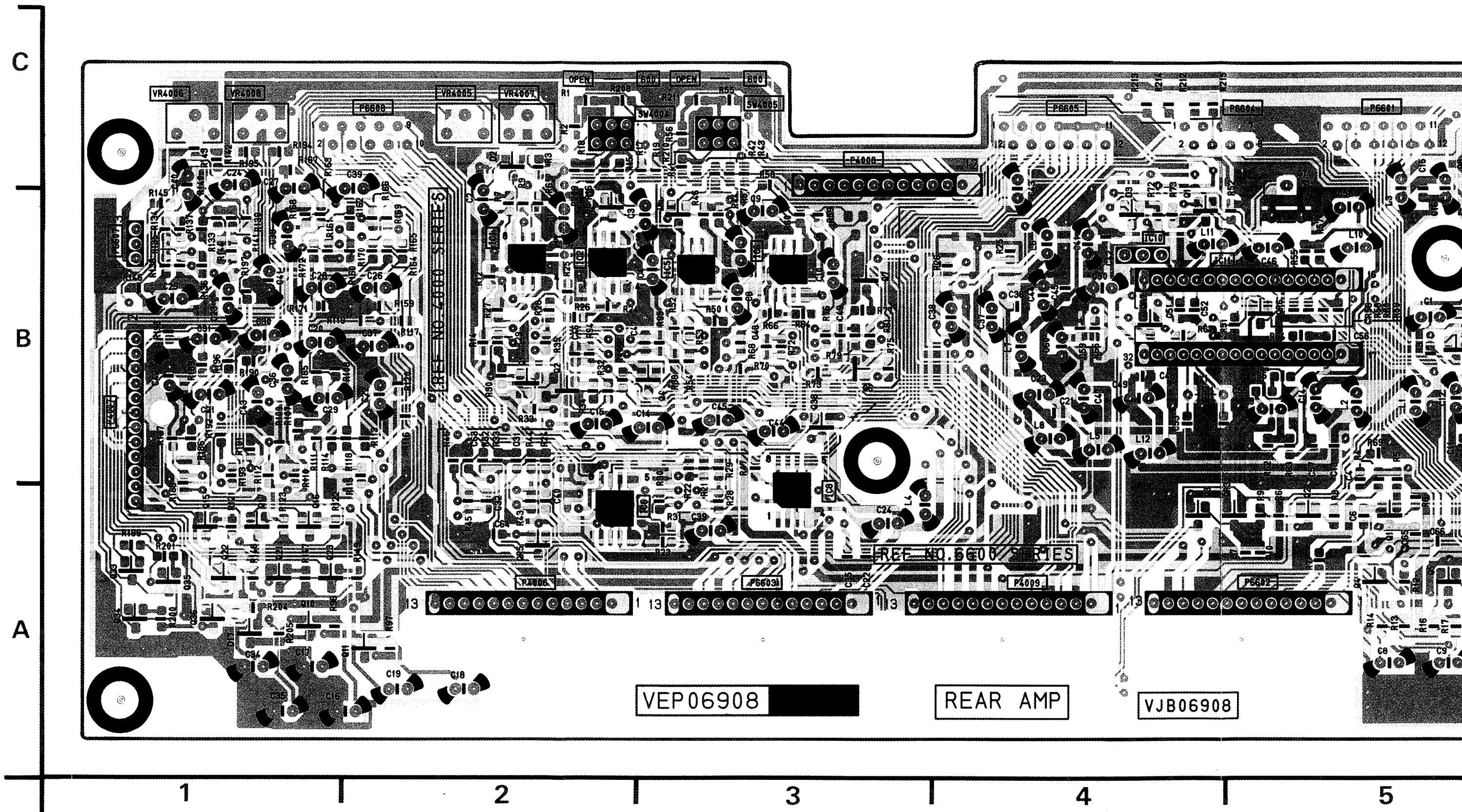
4

5

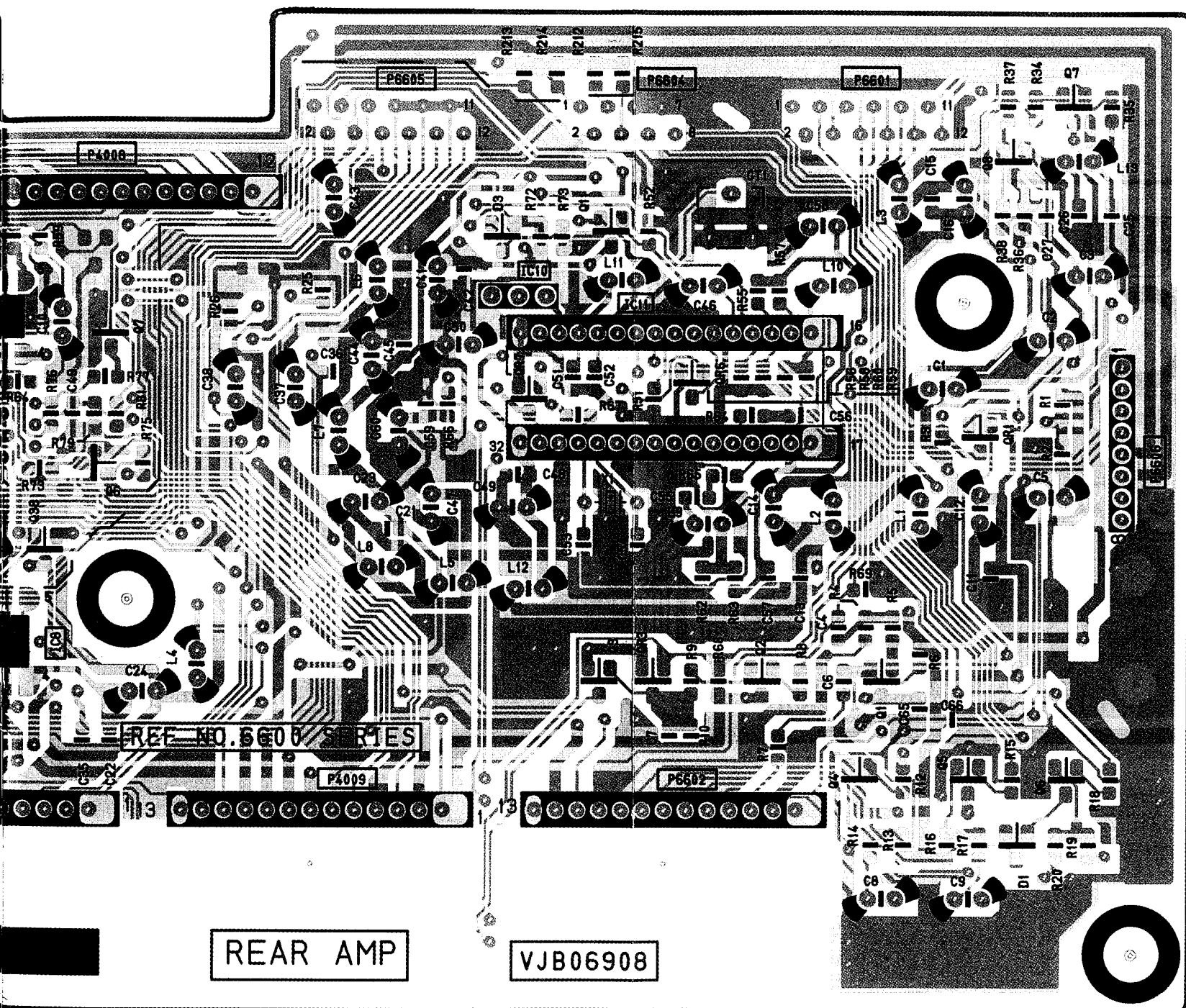
6



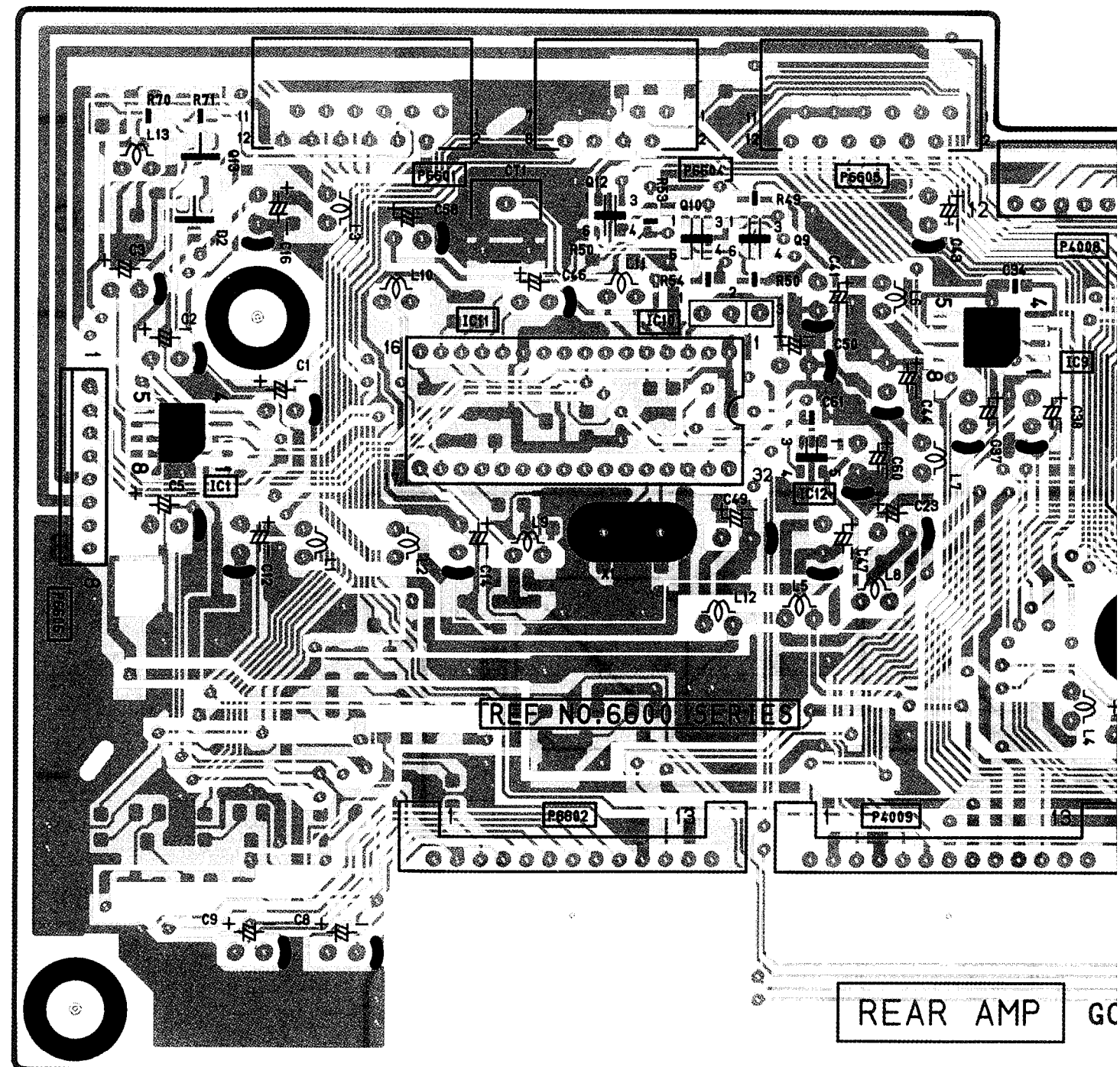
REAR AMP C.B.A. (E28)





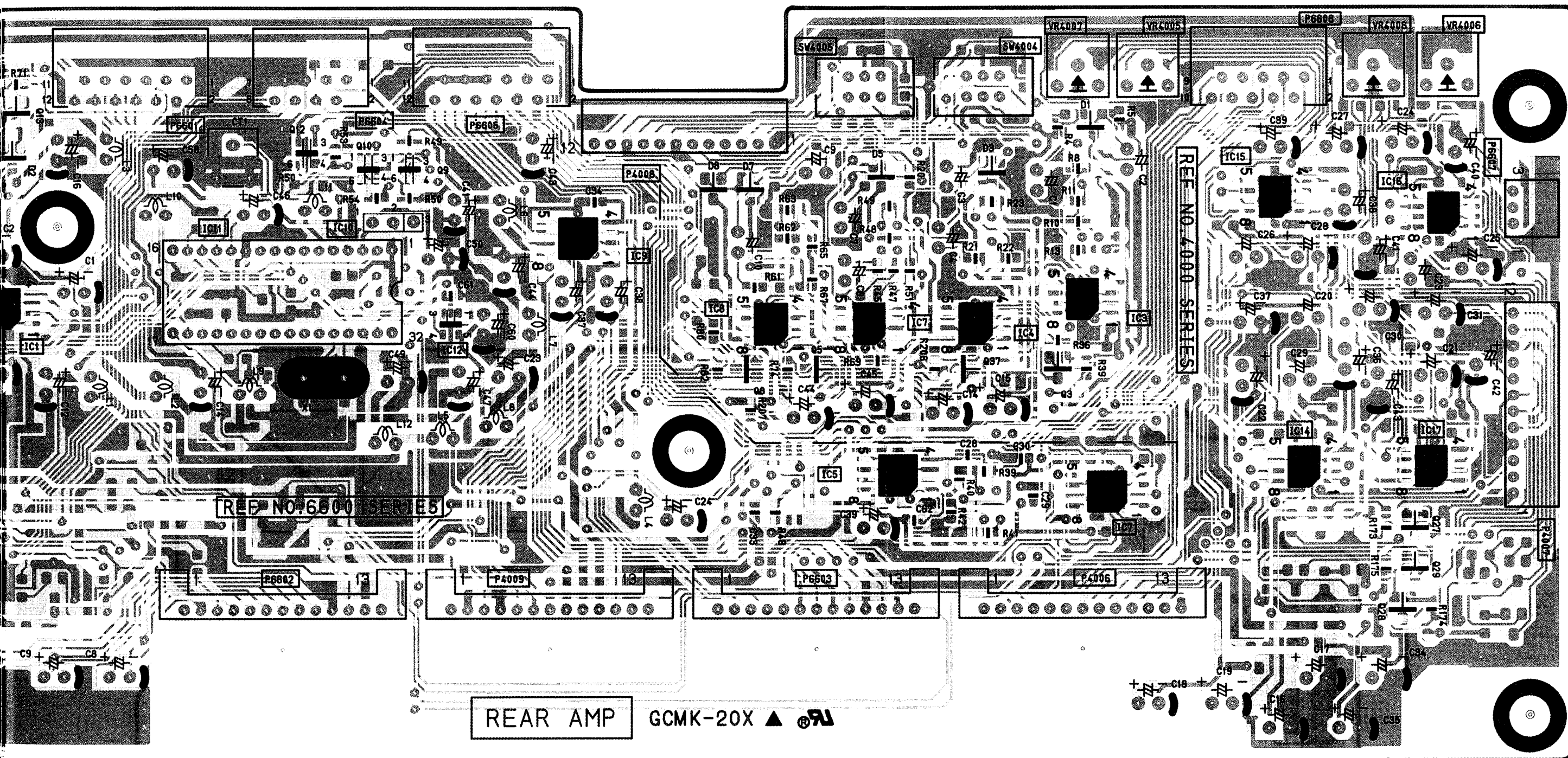


(FOIL SIDE)



3 4 5 6 7 8





(COMPONENT SIDE)

7

8

9

10

11



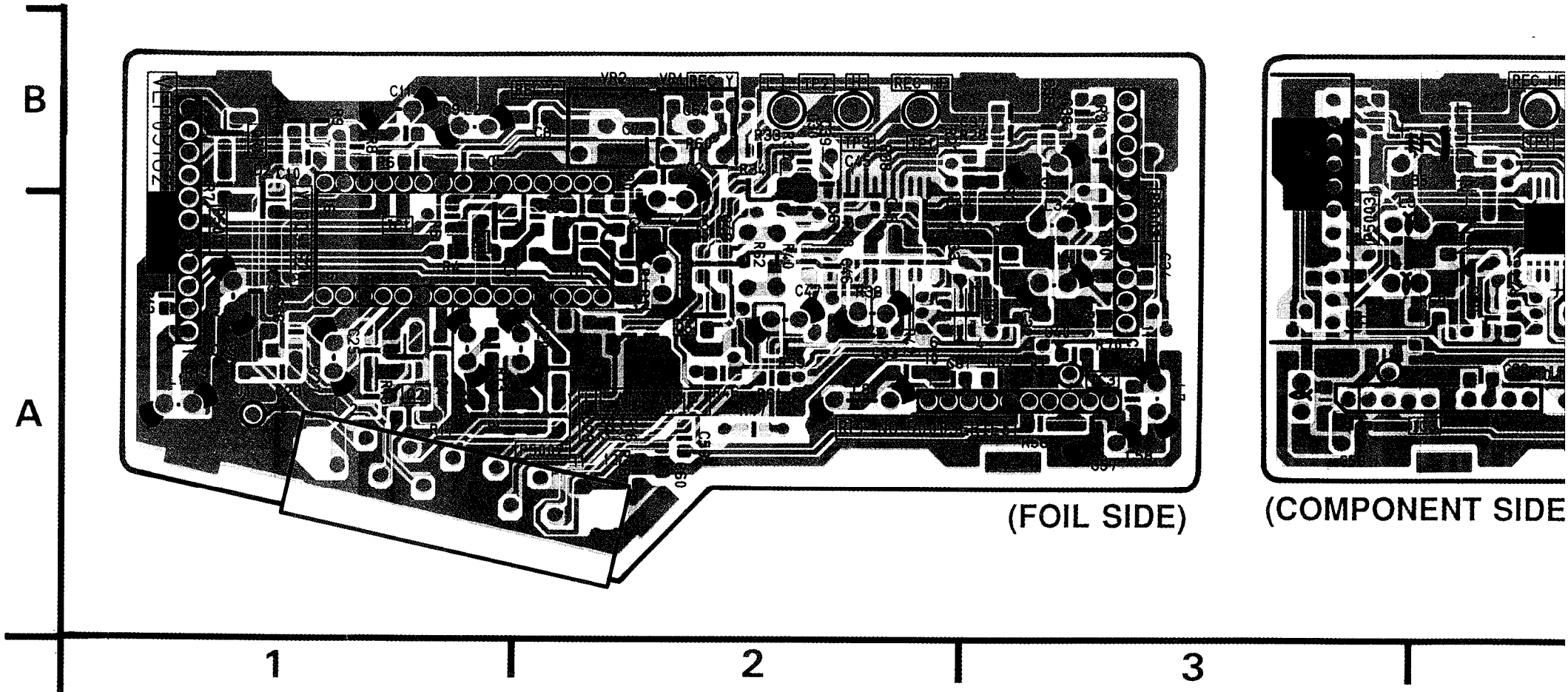
HEAD AMP C.B.A. (E15)

REAR AMP C.B.A.			
Transistor		IC4007	B-9
Q4001	B-2	IC4008	B-9
Q4002	B-2	IC4014	B-10
Q4003	B-9	IC4015	B-10
Q4004	B-3	IC4016	B-11
Q4005	B-9	IC4017	B-11
Q4006	B-3	IC6601	B-6
Q4007	B-3	IC6605	B-9
Q4008	B-9	IC6606	A-2
Q4010	A-1	IC6607	A-10
Q4011	A-2	IC6608	A-3
Q4015	A-1	IC6609	B-8
Q4016	A-1	IC6610	B-4
Q4017	A-1	IC6610	B-7
Q4021	A-1	IC6611	B-4
Q4022	A-1	IC6611	B-7
Q4023	A-1	IC6612	B-8
Q4027	A-11	Adjustment	
Q4028	A-11	VR4005	C-2
Q4029	A-11	VR4005	C-10
Q4033	A-1	VR4006	C-1
Q4034	A-1	VR4006	C-11
Q4035	A-1	VR4007	C-2
Q4036	A-1	VR4007	C-10
Q4037	B-9	VR4008	C-1
Q4038	B-3	VR4008	C-11
Q6601	A-5	Connector	
Q6602	A-5	P4006	A-2
Q6603	A-4	P4006	A-10
Q6604	A-5	P4007	B-1
Q6605	A-5	P4007	B-11
Q6606	A-5	P4008	C-3
Q6607	C-5	P4008	C-8
Q6608	C-5	P4009	A-4
Q6609	B-7	P4009	A-8
Q6610	B-7	P6601	C-5
Q6611	B-4	P6601	C-7
Q6612	C-7	P6602	A-5
Q6613	C-6	P6602	A-7
Transistor & Resistor		P6603	A-3
QR6601	B-5	P6603	A-9
QR6603	A-5	P6604	C-5
QR6605	A-2	P6604	C-7
QR6606	B-5	P6605	C-4
QR6607	B-4	P6605	C-8
Integrated Circuit		P6606	B-6
IC4001	B-2	P6606	B-6
IC4002	B-2	P6607	B-1
IC4003	B-10	P6607	B-11
IC4004	B-9	P6608	C-2
IC4005	B-3	P6608	C-10
IC4006	B-3		

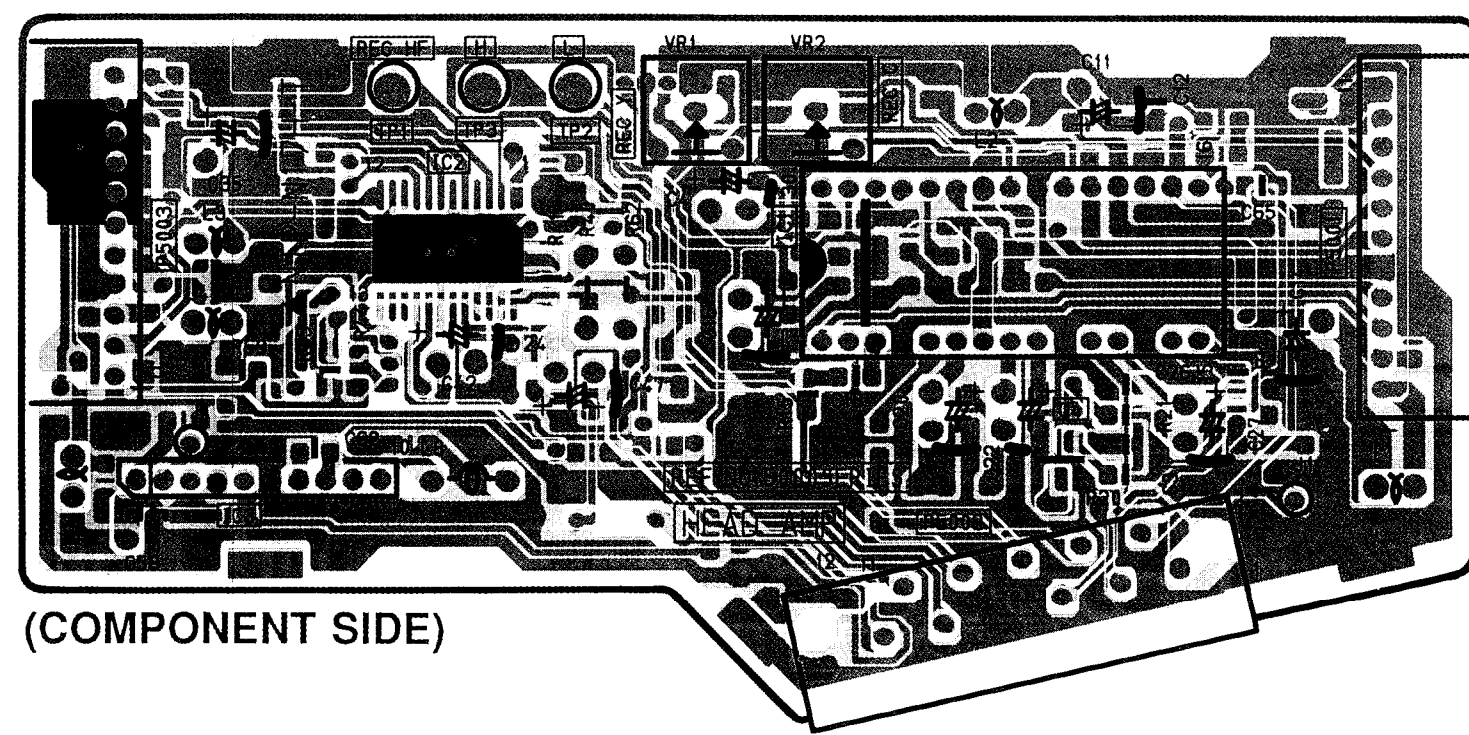
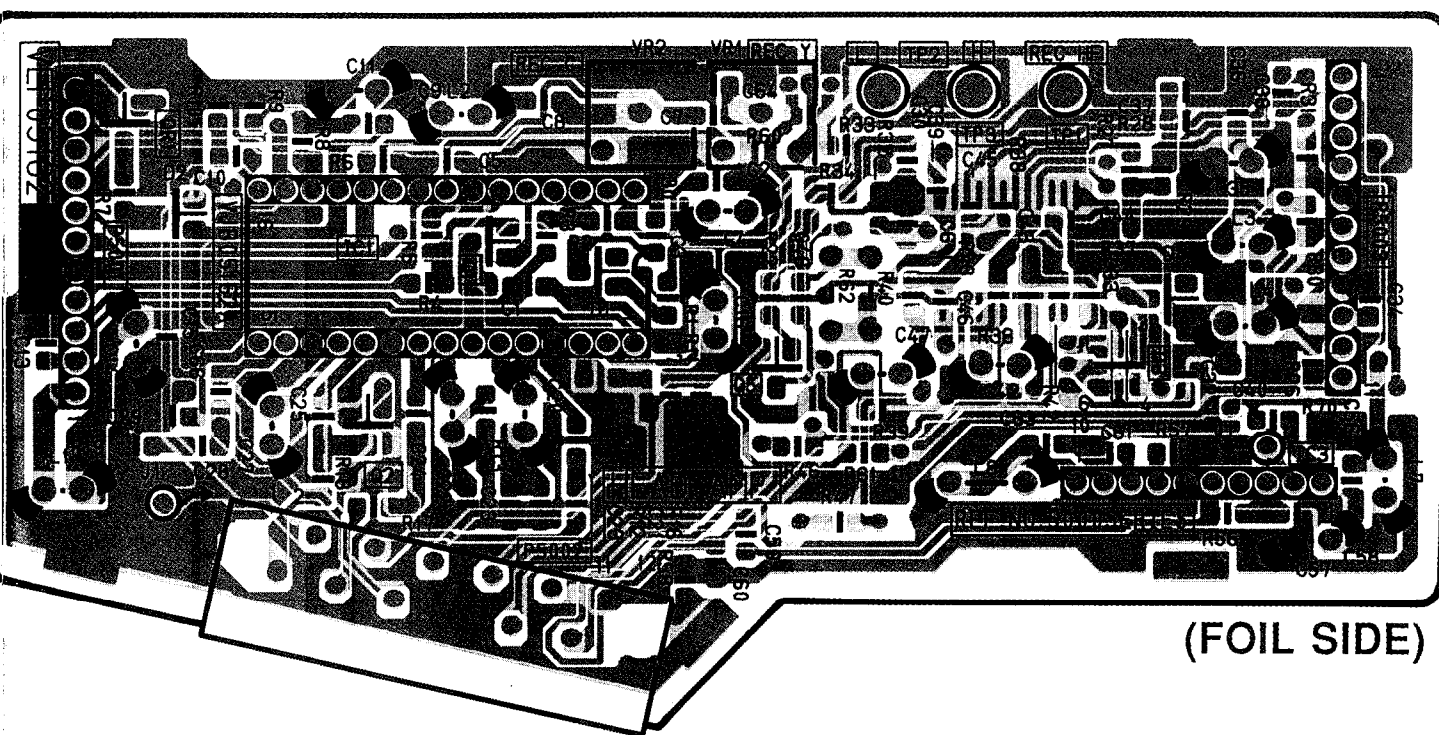
ADDRESS INFORMATION

HEAD AMP C.B.A.	
Transistor	
Q5001	A-1
Q5002	A-1
Q5003	A-3
Q5004	A-5
Q5005	A-2
Transistor & Resistor	
QR5001	B-1
Integrated Circuit	
IC5001	A-1
IC5001	A-5
IC5002	A-4
IC5003	A-3
IC5003	A-4
Test Point	
TP5001	B-2
TP5001	B-4
TP5002	B-2
TP5002	B-4
TP5003	B-2
TP5003	B-4
Adjustment	
VR5001	B-2
VR5001	B-4
VR5002	B-2
VR5002	B-4
Connector	
P5001	A-1
P5001	A-5
P5002	A-2
P5002	A-5
P5003	A-3
P5003	A-3

ADDRESS INFORMATION







1

2

3

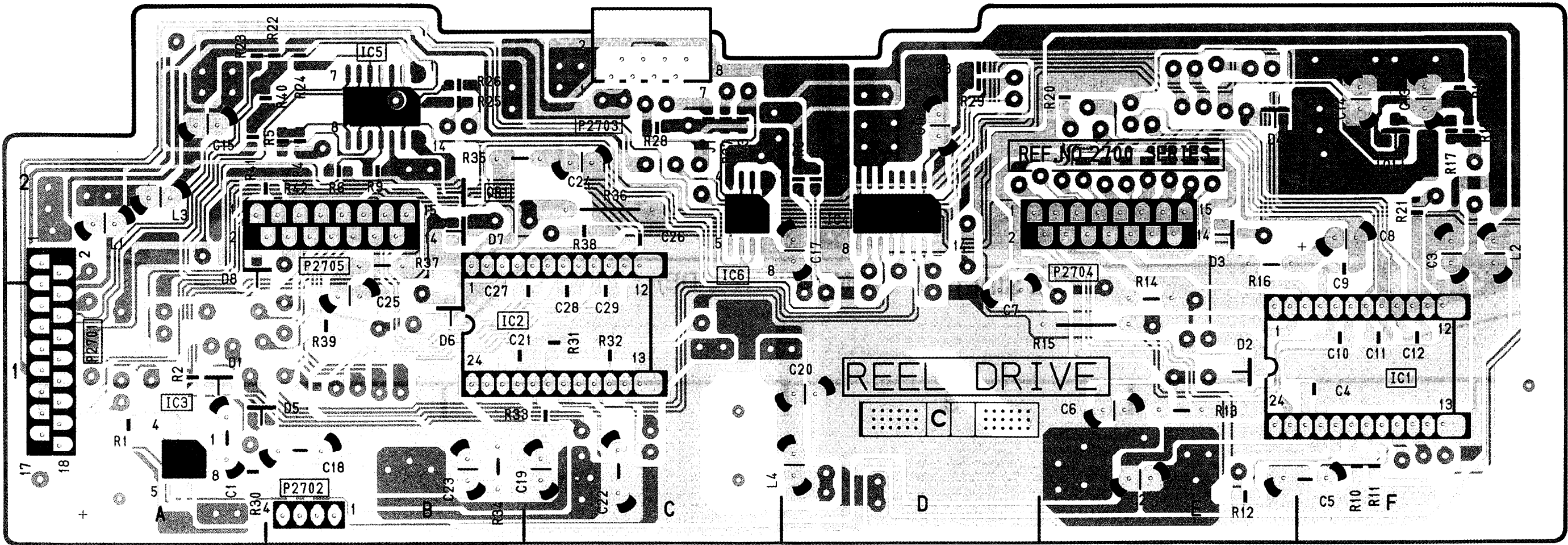
4

5

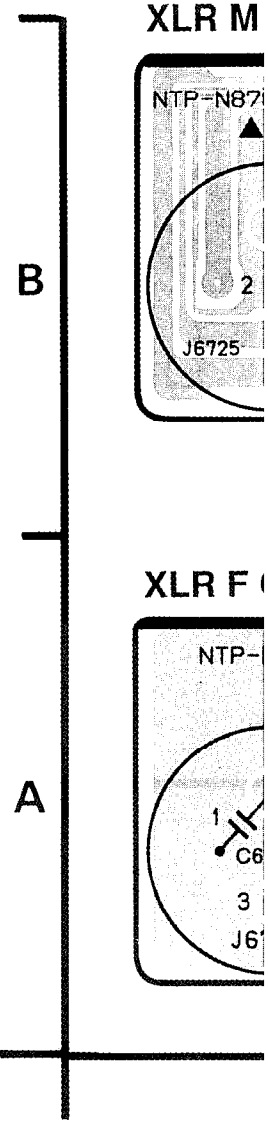


REEL DRIVE C.B.A.	
Transistor	
Q2701	F-2
Transistor & Resistor	
QR2701	B-2
Integrated Circuit	
IC2701	F-1
IC2702	C-1
IC2703	A-1
IC2704	D-2
IC2705	B-2
IC2706	C-2
Connector	
P2701	A-1
P2702	B-1
P2703	C-2
P2704	E-2
P2705	B-2

ADDRESS INFORMATION



(FOIL SIDE)





XLR M C.B.A. (E30) AND XLR F C.B.A. (E31)

REEL DRIVE C.B.A.	
Transistor	
Q2701	F-2
Transistor & Resistor	
QR2701	B-2
Integrated Circuit	
IC2701	F-1
IC2702	C-1
IC2703	A-1
IC2704	D-2
IC2705	B-2
IC2706	C-2
Connector	
P2701	A-1
P2702	B-1
P2703	C-2
P2704	E-2
P2705	B-2

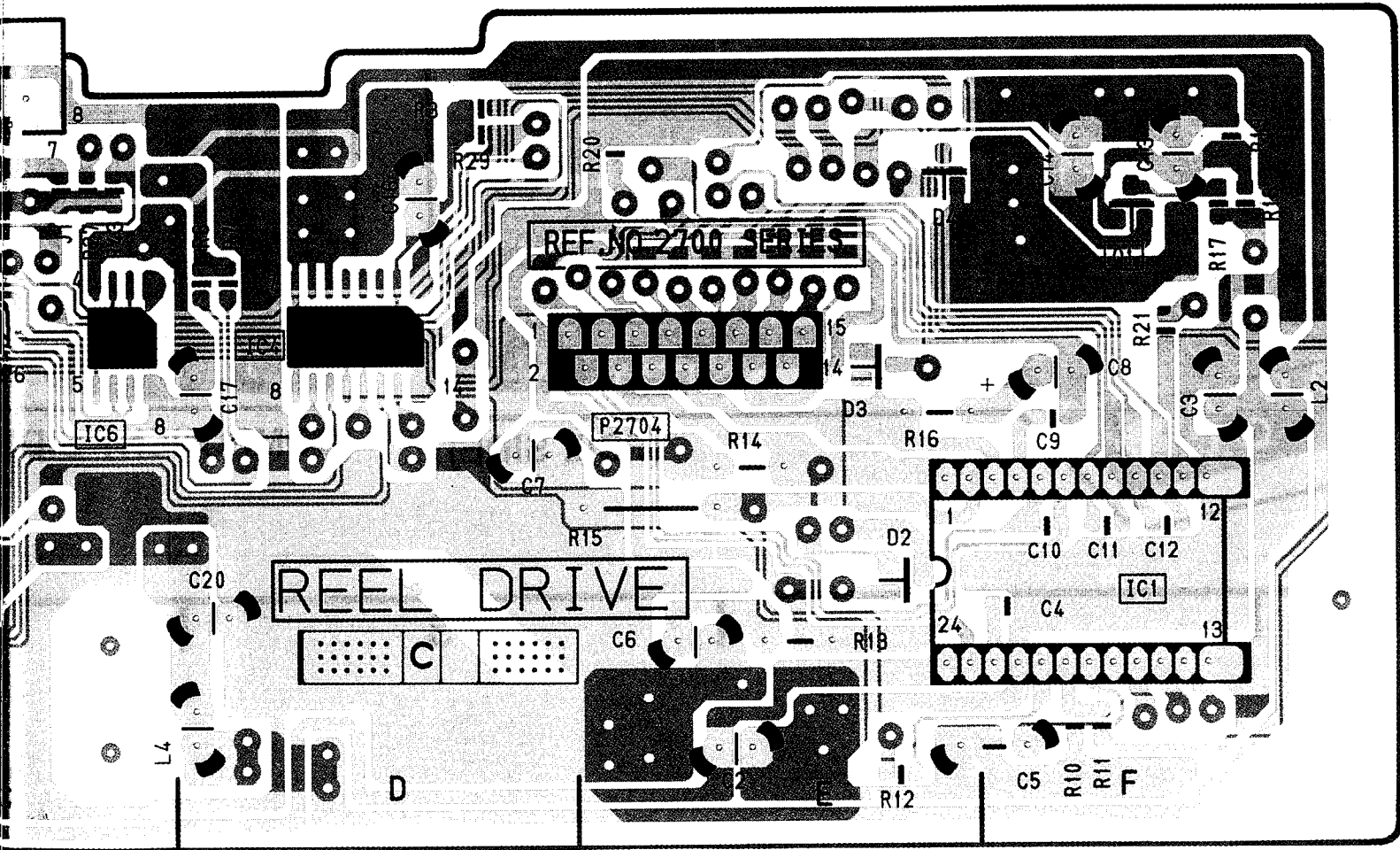
ADDRESS INFORMATION

XLR M C.B.A.	
Connector	
P6706	B-2
P6707	B-1

ADDRESS INFORMATION

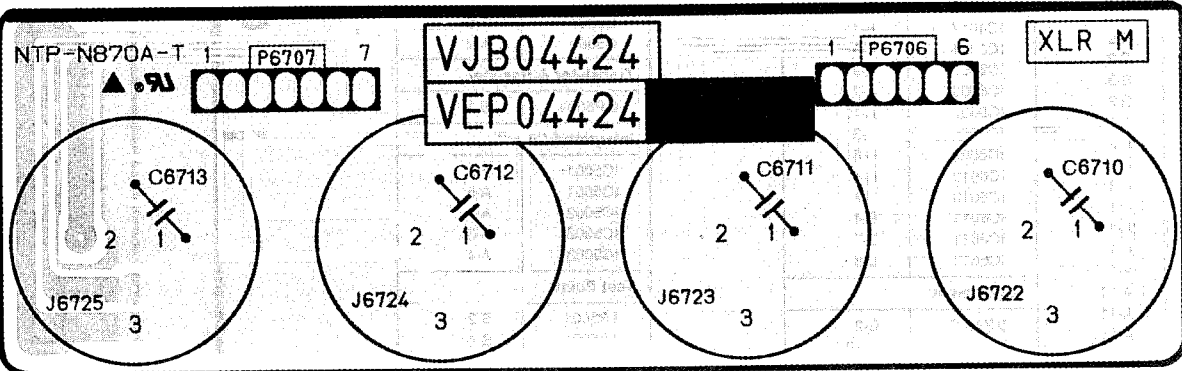
XLR F C.B.A.	
Connector	
P6708	A-2
P6709	A-1

ADDRESS INFORMATION



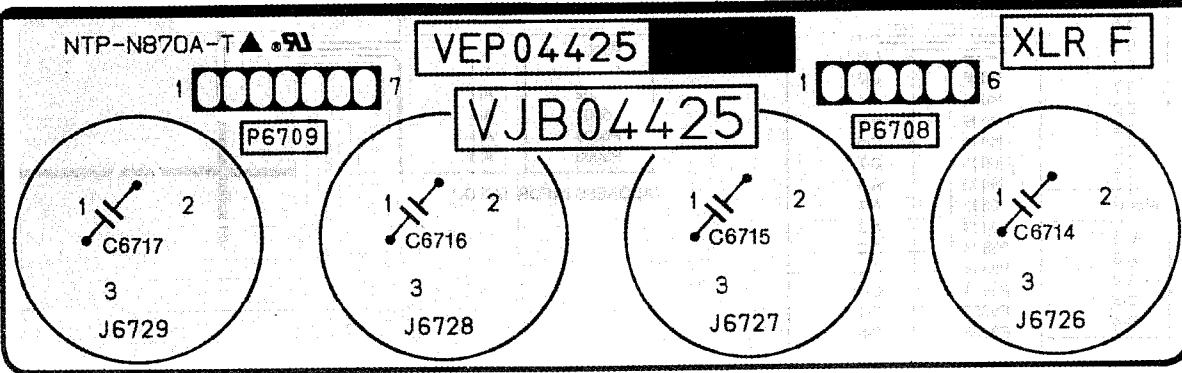
(FOIL SIDE)

XLR M C.B.A. (E30)



(FOIL SIDE)

XLR F C.B.A. (E31)



(FOIL SIDE)

1

2

3



# SECTION 5


## EXPLODED VIEWS & REPLACEMENT PARTS LISTS

### CONTENTS















SERVICING FIXTURES & TOOLS LIST .....	PRT-4
CHASSIS PARTS SECTION .....	PRT-5
MOVING PARTS SECTION .....	PRT-7
CASSETTE COMPARTMENT SECTION.....	PRT-8
CHASSIS & FRAME SECTION .....	PRT-10
CASING PARTS SECTION .....	PRT-11
PACKING PARTS SECTION .....	PRT-13
ELECTRICAL REPLACEMENT PARTS LIST .....	PRT-15



# NOTES

1. ● Be sure to make your orders of replacement parts according to this list.  
● "<R>" in Remark column indicates recommended parts.  
● "<M>" in Remark column indicates needed in the periodical maintenance.
2. IMPORTANT SAFETY NOTICE  
Components indentified by "<!>" have special characteristics important for safety.  
When replacing any of these components, use only the original ones.  
Meaning of symbol "<!>" on this parts list is exactly the same as symbol  on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;  
All resistors are in ( $\Omega$ ), K=1,000 $\Omega$ , M=1,000k $\Omega$ .  
All capacitors are in (F), U=10<sup>-6</sup> F, P=10<sup>-12</sup> F.
4. ITEM NUMBERS WITH CAPITAL LETTER E  
Item numbers with capital letter E (Example: E1, E2, ..... ) in Ref. no. column mean that the parts are listed with the E item numbers in the exploded views.
5. When ordering parts, use parts No. only from Part No. column.
6. Printed circuit board assembly with mark (RTL) is no longer available after discontinuation of the product.
7. Explanation of part number

## 《 CAPACITOR 》

Type                      Rated Volt.                      Capacitance Value

Type

Type	Delectric
ECA ECE ECS ECO	ELECTROLYTIC CAPACITOR
ECC ECF ECK ECU	CERAMIC CAPACITOR
ECH ECQ ECW	PLASTIC FILM CAPACITOR

Rated Volt.

Code	0G	0J	1A	1C	1D	1E	1V	1H	1J	1K
W.V. (V)	4	6.3	10	16	20	25	35	50	63	80

Code	2A	2C	2P	2D	2E	2F	2V	2G	2W	2H
W.V. (V)	100	160	180	200	250	315	350	400	450	500



## Capacitance Value

The 1st 2 figures are actual values and the 3rd denotes the number of zero.  
"R" denotes the decimal point and all figures are the actual number with "R".

※ Unit	Electrolytic capacitor	-----	μF
	Ceramic capacitor	-----	pF
	Plastic film capacitor	-----	pF

Example : ECEA1HU221 → ELECTCTROYTIC CAPACITOR  
50V 220  $\mu$ F

## 《 RESISTOR 》

Diagram illustrating the layout of the 16-bit data word:

- Type (3 bits)
- Rated Power (5 bits)
- Resistance Value (8 bits)

Type

Type	Delectric
ERD	CARBON RESISTOR
ERF FRW	WIRE WOUND RESISTOR
ERQ ERU	FISE RESISTOR
ERC	SOLID RESISTOR
ERX ERG ERO ERN	METAL RESISTOR
ERJ	CHIP RESISTOR
ERS	THERMAL SENSITIVE RESISTOR

Rated Power

Code	1	2	3	3G	6	8	10	12	14	25
R.Power (w)	1	2	3	1/16	1/10	1/8	1/8	1/2	1/4	1/4

Code	S1	S2							
R.Power (w)	1/2	1/4							

## Resistance Value

The 1st 2 figures are actual values and the 3rd denotes the number of zero.  
"R" denotes the decimal point and all figures are the actual number with "R".

Example : ERDS2TJ471 → CARBON RESISTOR  
1/4W 470Ω



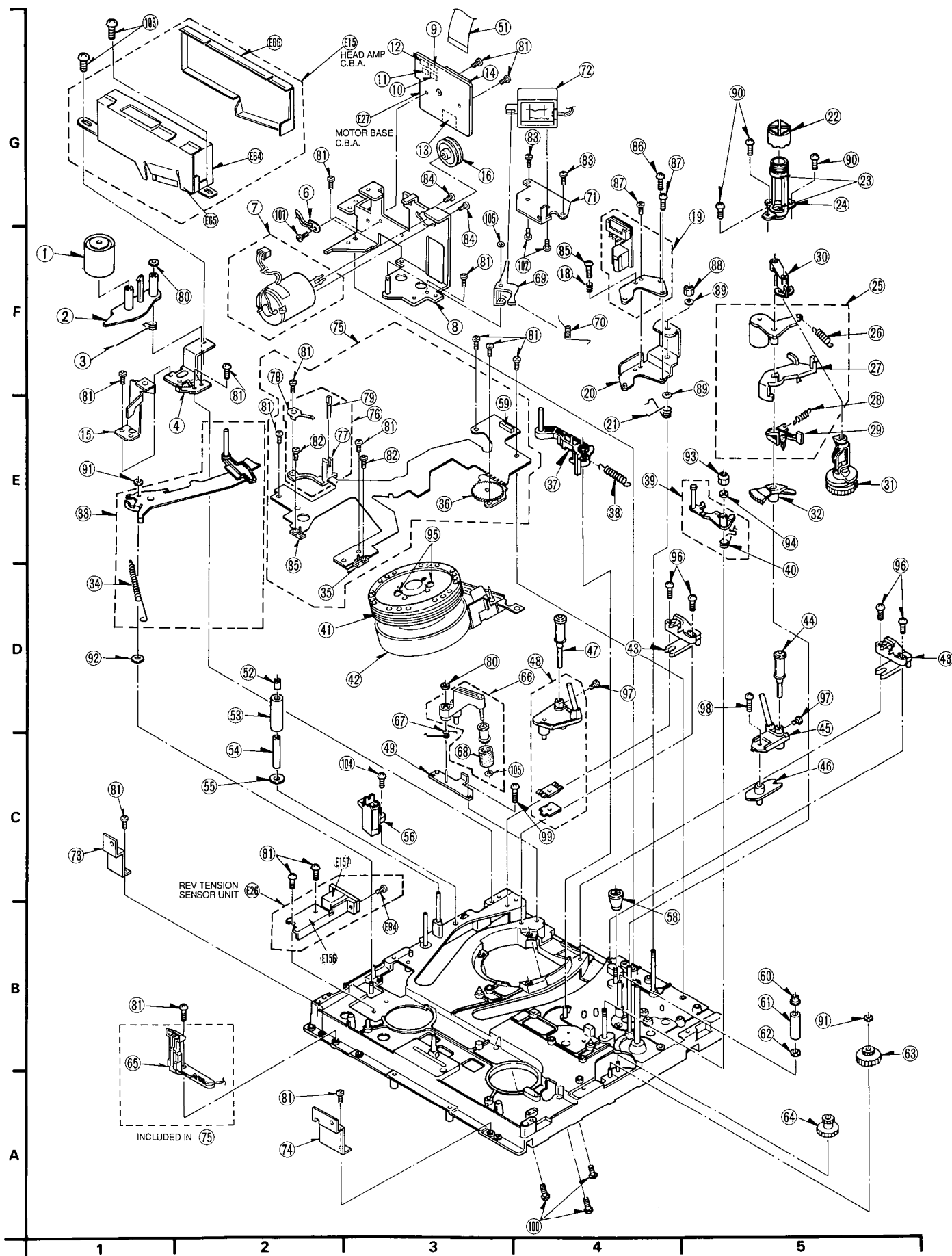
## SERVICEING FIXTURES & TOOLS LIST

[illegible]



EXPLODED VIEWS

1 Chassis Parts Section

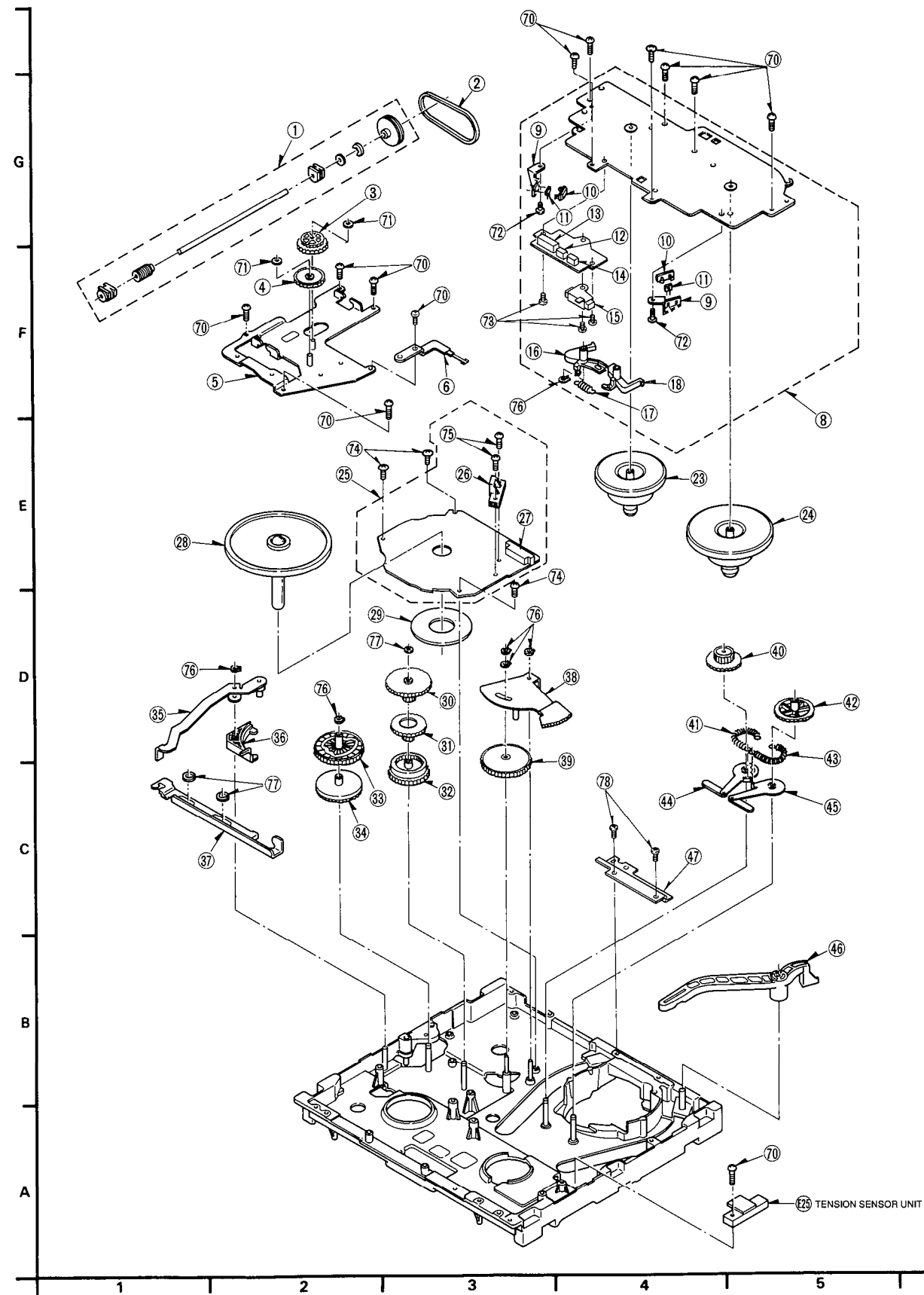


1. Chassis Parts Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1-1	VXP1075	IMPEDANCE ROLLER UNIT	1		1-78	VMB2020	EARTH SPRING	1	
1-2	VML2293	IMPEDANCE ROLLER ARM	1		1-79	GL450	LED	1	
1-3	VMB1976	IMPEDANCE SPRING	1		1-80	VMX1079	CUT WASHER	2	
1-4	VMA7982	HEAD AMP ANGLE (L)	1		1-81	XTV26+6F	SCREW	14	
1-6	VEK3185	HUMIDITY RESISTOR UNIT	1	<R>	1-82	XTV2+4F	SCREW	2	
1-7	VEM0360	LOADING MOTOR UNIT	1	<R><R><R>	1-83	XYN26+K5	SCREW	2	
1-8	VXA5151	MOTOR BASE (1) UNIT	1		1-84	XSN3+3.5	SCREW	2	
1-9	VJP1229G	CONNECTOR (2P)	1		1-85	VHD0322	SCREW	1	
1-10	VJP1229R	CONNECTOR (2P)	1		1-86	VHD0089B	SCREW	1	
1-11	VJP1229R	CONNECTOR (2P)	1		1-87	XSN306FZ	SCREW	2	
1-12	VJP1230R	CONNECTOR (3P)	1		1-88	VHN0063	M4 NYLON NUT	1	
1-13	VJP3106B013	CONNECTOR (13P)	1		1-89	XWE4	M4 NYLON WASHER	2	
1-14	VJS1493	CONNECTOR (15P)	1		1-90	VHD0374	SCREW	3	
1-15	VMAB130	IMPEDANCE ROLLER SUPPORT	1		1-91	VMX0653	CUT WASHER	2	
		ANGLE			1-92	XWGV306G	POLLY SLIDER WASHER	1	
1-16	VDP1319	MOTOR PULLEY	1		1-93	VHD0045	M3 NYLON NUT	1	
1-18	VMB1251	ADJUST SPRING	1		1-94	XWE3VW	M3 WASHER	1	
1-19	VED0145	A/C HEAD (1) UNIT	1	<R>	1-95	VHD0425	SCREW	2	
1-20	VXA3649	A/C HEAD BASE UNIT	1		1-96	XTV26+10F	SCREW	4	
1-21	VMB1567	A/C HEIGHT SPRING	1		1-97	VHD0133	SCREW	2	
1-22	VXQ0094	THRUST SCREW UNIT	1		1-98	XYN26+6FZ	SCREW	1	
1-23	VMX1567	OIL SEAL	2		1-99	XTN3+6F	SCREW	1	
1-24	VXD0120	HOUSING UNIT	1		1-100	VHD0342	SCREW	3	
1-25	VXL2367	PRESSURE ROLLER UNIT	1	<R>	1-101	XTV2+6J	SCREW	1	
1-26	VMB1977	PINCH PRESSURE SPRING	1		1-102	XYN26+C4	SCREW	2	
1-27	VXL2368	PINCH PRESSURE ARM	1		1-103	XTW3+8TR	SCREW	2	
1-28	VMB1569	PINCH ARM SPRING	1		1-104	XTV26+8E	SCREW	1	
1-29	VML1874	PINCH LIFT ARM	1		1-105	VMX0653	CUT WASHER	11	
1-30	VMX1353	PINCH CAM ARM	1						
1-31	VDG0577	PINCH CAM	1						
1-32	VDG0651	PINCH SECTOR GEAR	1						
1-33	VXL2089	TENSION ARM UNIT	1						
1-34	VMB1975	TENSION SPRING	1						
1-35	VSP0293	CASSETTE DETECT SW	2						
1-36	VSS0257	MODE SWITCH	1	<R>					
1-37	VXL1857	SUB LOADING ARM (1) UNIT	1						
1-38	VMB1566	SUB POST SPRING	1						
1-39	VXL2074	P5 ARM UNIT	1						
1-40	VMB1554	P5 SPRING	1						
1-41	VEH0645	UPPER CYLINDER UNIT	1	<R>					
1-42	VEG1109	LOWER CYLINDER UNIT	1	<R>					
1-43	VMD0910	POST STOPPER	2						
1-44	VXP1264	ROLLER POST (T) UNIT	1						
1-45	VXA3213	INCLINED BASE (T)(1) UNIT	1						
1-46	VXA2687	INCLINED ADJUSTMENT PLATE U	1						
1-47	VXP1263	ROLLER POST (S) UNIT	1						
1-48	VXA3249KIT	INCLINED BASE (S)	1						
1-49	VXA3980	HEAD CLEANING PLATE	1						
1-51	VEE8714	FLEXIBLE CABLE	1						
1-52	VMX1088	SUPPLY UPPER LIMITER	1						
1-53	VDP1533	SUPPLY ROLLER	1						
1-54	VMX1581	P1 COLLAR	1						
1-55	VMX1533	SUPPLY LOWER LIMITER	1						
1-56	VBS0038	FE HEAD	1						
1-58	VHN0110	ADJUST NUT	1						
1-59	VJS2964A013	CONNECTOR (15P)	1						
1-60	VMX1544	P4 UPPER LIMITER	1						
1-61	VMX1568	P4 SLEEVE	1						
1-62	VMX1534	P4 LOWER LIMITER	1						
1-63	VDG0664	CONNECTION GEAR	1						
1-64	VDG0483	PINCH SPEED DOWN GEAR	1						
1-65	VES0489	SAFETY SWITCH	1						
1-66	VXL2263	HEAD CLEANING UNIT	1	<R>					
1-67	VMB2532	CLEANING SPRING	1						
1-68	VMT0321	HEAD CLEANING PAD	1						
1-69	VML2845	CAM LEVER	1						
1-70	VMB2672	CAM LEVER SPRING	1						
1-71	VMA8977	SOLENOID BASE	1						
1-72	VJS0111	PINCH SOLENOID	1						
1-73	VMA6895	MOUNT PLATE (L)	1						
1-74	VMA6896	MOUNT PLATE (R)	1						
1-75	VXA5165	BIND FLEXIBLE UNIT	1						
1-76	VXA3520	LED UNIT	1						
1-77	VMD0911	LED HOLDER	1						



## ② Moving Parts Section



PRT-7

## 2. Moving Parts Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
2-1	VXP1082	WORM SHAFT UNIT	1	
2-2	VDV0228	LOADING BELT	1	<R>
2-3	VDG0581	WORM WHEEL	1	
2-4	VDG0582	INTERMEDIATE GEAR	1	
2-5	VXA3646	GEAR BASE (1) UNIT	1	
2-6	VXS0098	EARTH SPRING UNIT	1	
2-8	VXA4839	STATOR BASE UNIT	1	
2-9	VMD0611	FG SUPPORT (1)	2	
2-10	VMD0621	FG SUPPORT (2)	2	
2-11	HW-300B	HOLE IC	2	<R>
2-12	VJP1230R	CONNECTOR (3P)	1	
2-13	VJP3202A008Z	CONNECTOR (8P)	1	
2-14	VJP1230T	CONNECTOR (3P)	1	
2-15	VSO0066	SOLENOID	1	<I>
2-16	VXZ0270	MAIN BRAKE (S) UNIT	1	<R>
2-17	VMB1978	BRAKE SPRING	1	
2-18	VXZ0314	MAIN BLAKE (T) UNIT	1	<R>
2-23	VXR0187	TAKEUP REEL TABLE UNIT	1	<R>
2-24	VXR0225	SUPPLY REEL TABLE UNIT	1	<R>
2-25	VEK6553	STATOR UNIT	1	
2-26	VBK0063	MR HEAD	1	<R>
2-27	VJP1902	CONNECTOR	1	
2-28	VXP1456	ROTOR UNIT	1	
2-29	VMA6847	SUB PLATE	1	
2-30	VDG0580	CENTER GEAR	1	
2-31	VXP0878	RETAINER GEAR UNIT	1	
2-32	VDG0342	RING GEAR	1	
2-33	VED0578	MAIN CAM GEAR	1	
2-34	VED0343	SUB CAM GEAR	1	
2-35	VXL1895	CAM FOLLOWER ARM UNIT	1	
2-36	VML1861	DETENT ARM	1	
2-37	VMD0218	MAIN ROD	1	
2-38	VXA3144	SECTOR GEAR UNIT	1	
2-39	VDG0579	LOADING CAM GEAR	1	
2-40	VED0420	LOADING GEAR (T)	1	
2-41	VMB1555	LOADING SPRING (T)	1	
2-42	VDG0593	LOADING GEAR (S)	1	
2-43	VMB1746	LOADING SPRING (S)	1	
2-44	VXL1489	LOADING ARM (T)(1) UNIT	1	
2-45	VXL1487	LOADING ARM (S)(1) UNIT	1	
2-46	VML2304	CLEANING ROD	1	
2-47	VMA8003	MOUNT PLATE (B)	1	
2-70	XTV26+6F	SCREW	12	
2-71	VMX0653	CUT WASHER	2	
2-72	XYN2+F5	SCREW	2	
2-73	XSN26+4	SCREW	3	
2-74	XYEV0004	SCREW	3	
2-75	XYNV0015	SCREW	2	
2-76	XUEV3W	WASHER	6	
2-77	XUEV3W	CUT WASHER	3	
2-78	XTV3+8F	SCREW	2	

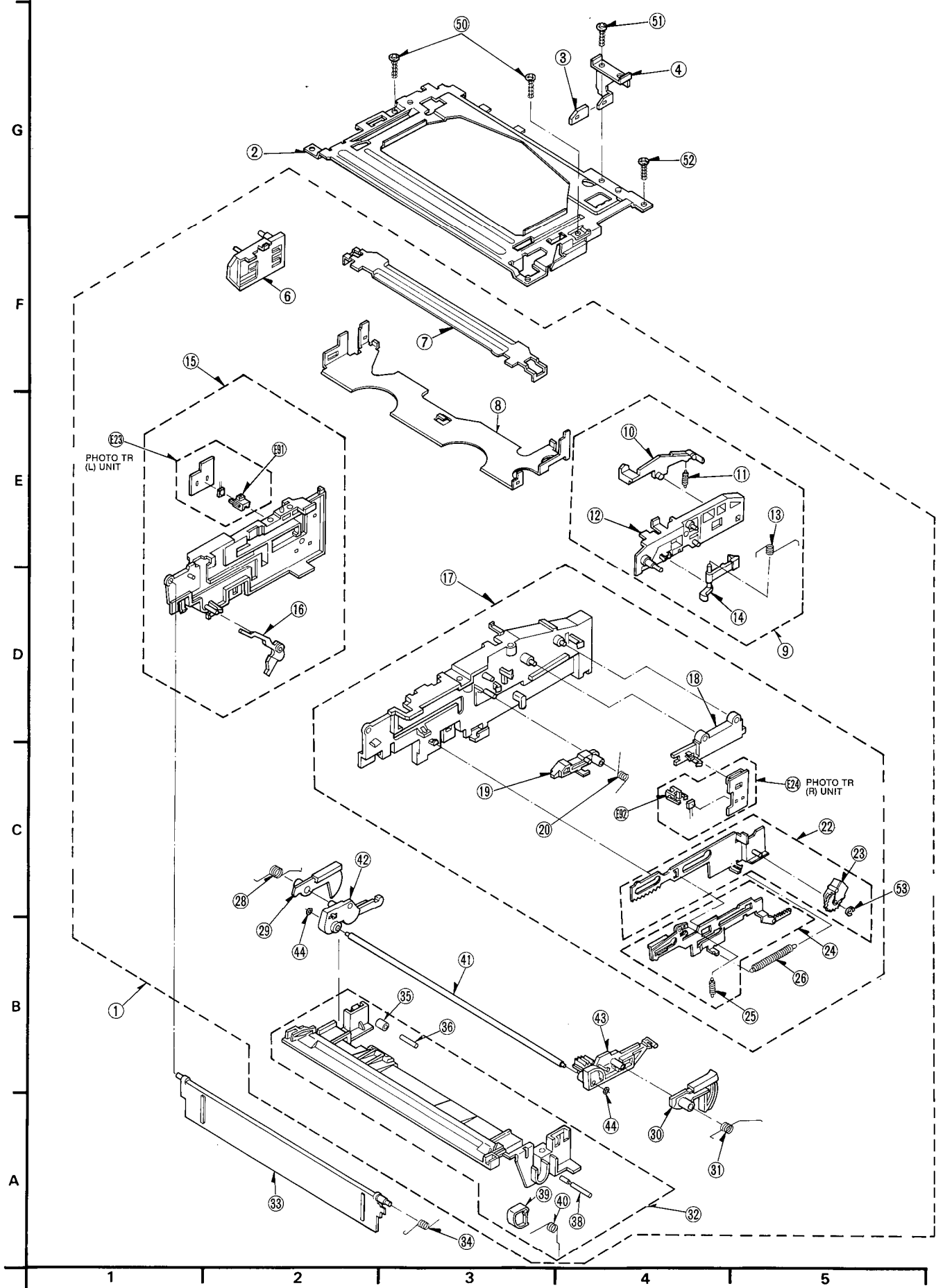
PRT-8

## 3. Cassette Compartment Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
3-1	VXA4504	CASSETTE COMPARTMENT UNIT	1	<R>
3-2	VMA8166	TOP PLATE	1	
3-3	VMD1384	CASSETTE HOLDER CAP	1	
3-4	VMA7992	CASSETTE HOLDER ANGLE	1	
3-6	VMD1387	HOLDER GUIDE (L)	1	
3-7	VXA3691	HOLDER ANGLE UNIT	1	
3-8	VMA7989	CASSETTE HOLDER	1	
3-9	VXA3692	HOLDER GUIDE (R) UNIT	1	
3-10	VML1882	DOOR OPEN LEVER	1	
3-11	VMB1584	DOOR OPEN LEVER SPRING	1	
3-12	VMD1386	HOLDER GUIDE (R)	1	
3-13	VMB2063	RELEASE SPRING	1	
3-14	VML2306	RELEASE LEVER	1	
3-15	VXA3694	SIDE PLATE (L) UNIT	1	
3-16	VML2305	OPENER LEVER	1	
3-17	VXA3693	SIDE PLATE (R) UNIT	1	
3-18	VSS0258	SLIDE SWITCH	1	<R>
3-19	VML2288	DOWN SUPPORT LEVER	1	
3-20	VMB1961	DOWN SUPPORT SPRING	1	
3-22	VXA3696	MAIN RACK UNIT	1	
3-23	VDG0737	DAMPER	1	
3-24	VXA3697	SUB RACK UNIT	1	
3-25	VMB1780	RACK C SPRING	1	
3-26	VMB1997	CLUTCH SPRING	1	
3-28	VMB1999	SUB WIPER SPRING (L)	1	
3-29	VML1878	SUB WIPER ARM (L)	1	
3-30	VML1879	SUB WIPER ARM (R)	1	
3-31	VMB1998	WUB WIPER SPRING (R)	1	
3-32	VXA4500	CASSETTE GUIDE UNIT	1	
3-33	VKF1273	BLINDER PANEL	1	
3-34	VMB1258	BLINDER SPRING	1	
3-35	VDP1398	CASSETTE ROLLER	1	
3-36	VMS5505	ROLLER SHAFT	1	
3-38	VMS4644	SHAFT	1	
3-39	VMD1773	CASSETTE SUPPORT	1	
3-40	VMB2329	SUPPORT SPRING	1	
3-41	VMS3182	MAIN SHAFT	1	
3-42	VML1876	WIPER ARM (L)	1	
3-43	VML1877	WIPER ARM (R)	1	
3-44	VHN0068	STOPPING WASHER	2	
3-50	XTV26+8G	SCREW	2	
3-51	XTV26+6F	SCREW	1	
3-52	XTV3+8G	SCREW	1	
3-53	XUC2.5FP	E RING	1	

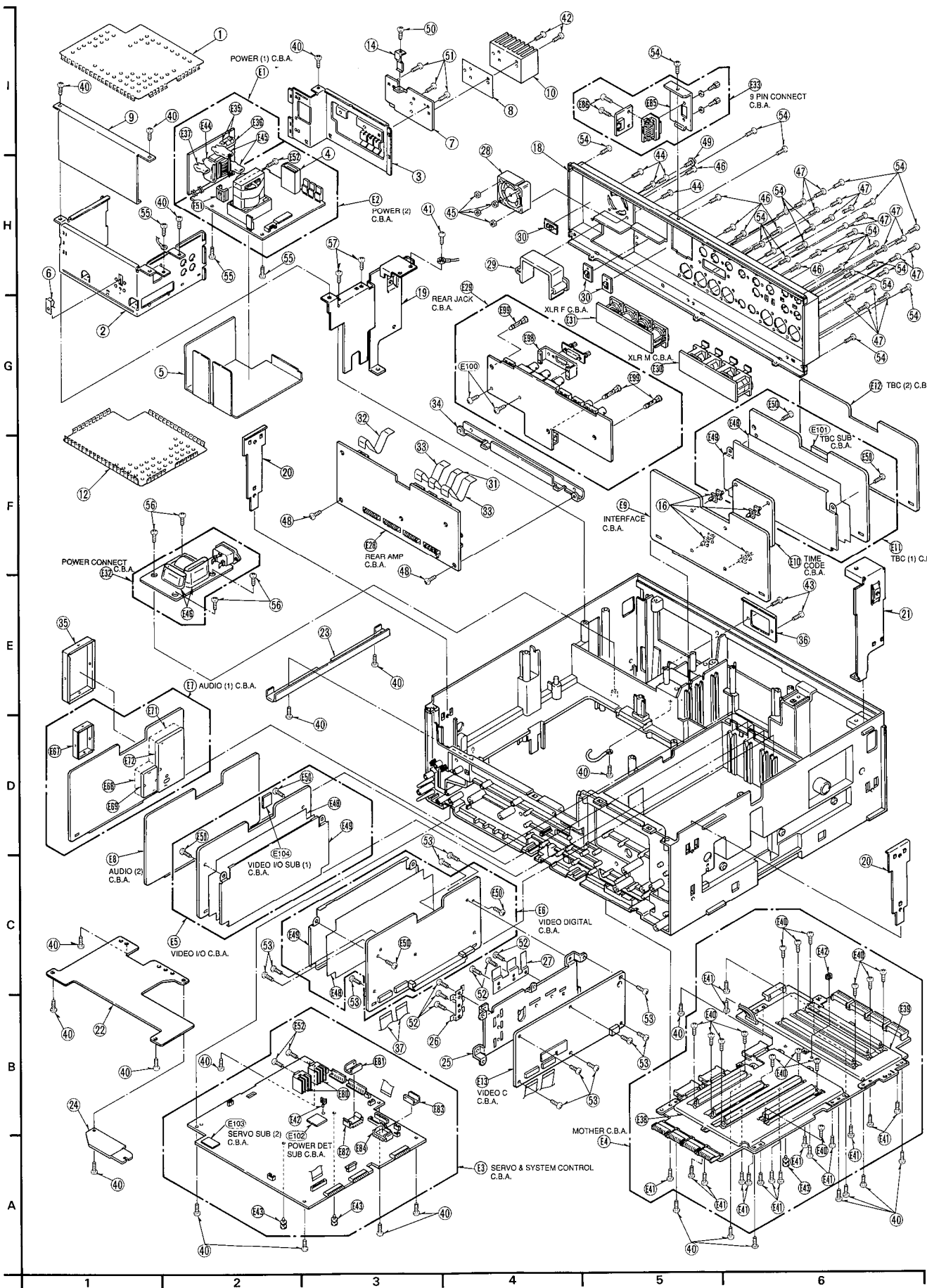


### 3 Cassette Compartment Section





4





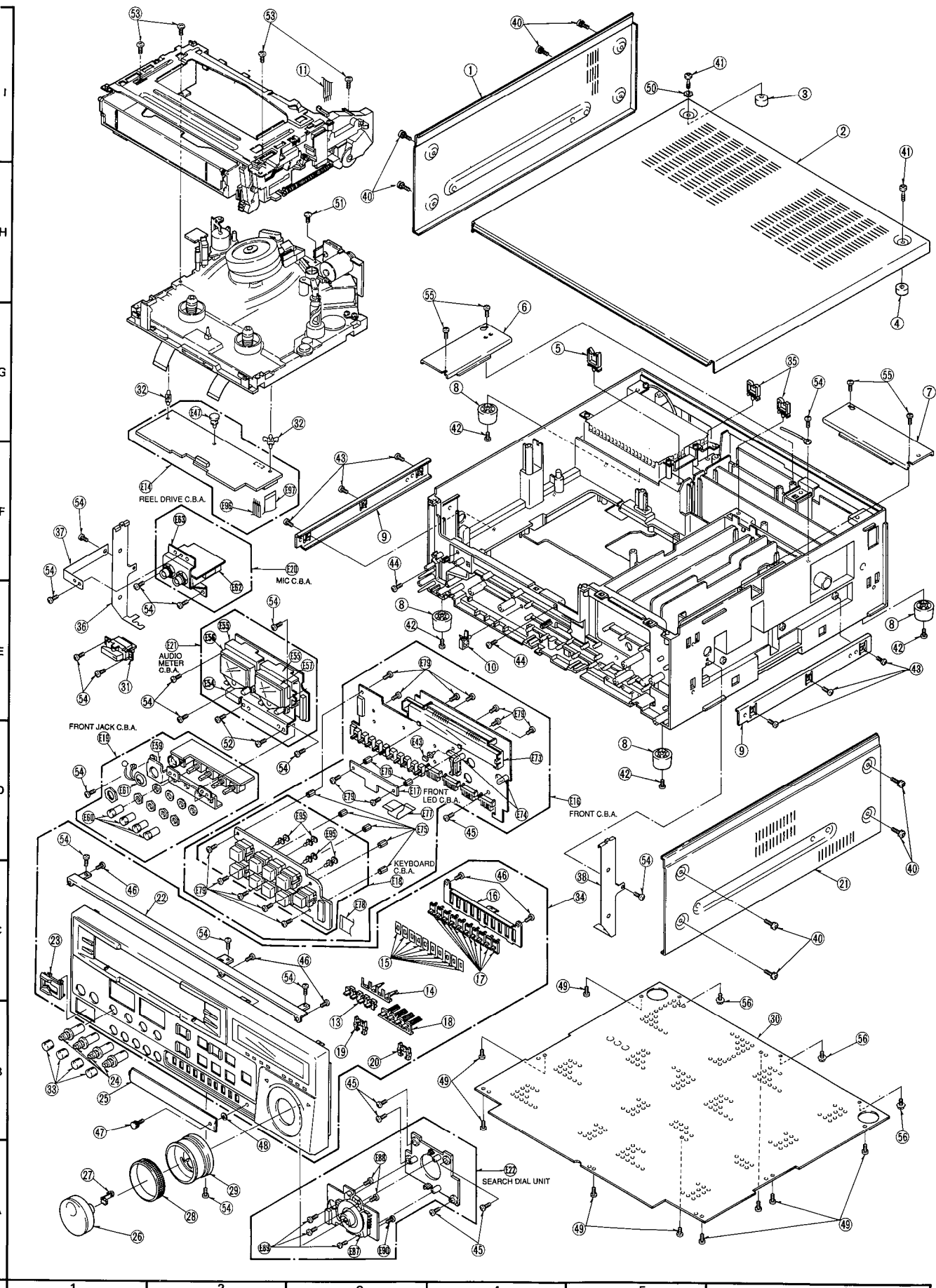
#### 4. Chassis & Frame Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
4-1	VSC3961	POWER UNIT SHIELD CASE (UPPER)	1	
4-2	VSC3963	POWER SHIELD CASE (MIDDLE (A))	1	
4-3	VSC3964	POWER SHIELD CASE (MIDDLE (B))	1	
4-4	VM20103	INSULATION TUBE	1	
4-5	VM22224	INSULATION SHEET	1	
4-6	VMC0357	TR SPRING	1	
4-7	VSC3965	POWER SHIELD PLATE	1	
4-8	VM20534	INSULATION SHEET	1	
4-9	VSC4085	POWER SHIELD SHEET	1	
4-10	VSC3966	HEAT SINK	1	
4-12	VSC3962	POWER SHIELD CASE (LOWER)	1	
4-14	VMP3083	TR HOLDER	1	
4-16	VJH0632	C.B. HOLDER	4	
4-18	VJH0719	REAR JACK PLATE	1	
4-19	VMP3221	TOP ANGLE (LEFT)	1	
4-20	VXA4649	SIDE ANGLE UNIT	2	
4-21	VMP3222	TOP ANGLE (RIGHT)	1	
4-22	VMP3216	MECHANISM SHIELD PLATE	1	
4-23	VMP3232	POWER CORD SHIELD ANGLE	1	
4-24	VMP3750	SUPPORT ANGLE	1	
4-25	VSC3975	C.B. HEAT SINK	1	
4-26	VMC0979	HEAT SINK PLATE (1)	1	
4-27	VMC0980	HEAT SINK PLATE (2)	1	
4-28	VRF0085	FAN MOTOR	1	
4-29	VGF0507	AC INLET GUARD	1	
4-30	VJF0977	CABLE CLIP	3	
4-31	VMJ08AW070M0	FLEXIBLE CABLE	1	
4-32	VMJ10AQ070M0	FLEXIBLE CABLE	1	
4-33	VMJ12AW070M0	FLEXIBLE CABLE	2	
4-34	VMP4224	REAR AMP ANGLE	1	
4-35	VSC3970	SHIELD COVER (UPPER)	1	
4-36	VMP4246	AC INLET ANGLE	1	
4-37	VMJ18XW040L0	FLEXIBLE CABLE	2	
4-40	XTV3+10JFR	SCREW	24	
4-41	XYE4+EF6	SCREW	1	
4-42	XYN26+C12FZ	SCREW	2	
4-43	XYN3+F12FZ	SCREW	2	
4-44	XSN3+20FZS	SCREW	4	
4-45	XNG3B	NUT	4	
4-46	XTV3+8GFZ	SCREW	6	
4-47	XSN26+6FZ	SCREW	16	
4-48	XTV3+8FFR	SCREW	2	
4-49	VHD0426	SCREW	1	
4-50	XYN3+C8	SCREW	1	
4-51	XTS3+8F	SCREW	3	
4-52	XSB2+4FZ	SCREW	6	
4-53	XTV3+6FFR	SCREW	11	
4-54	XTV3+8FFZ	SCREW	23	
4-55	XYE3+EF8FR	SCREW	3	
4-56	XTM3+10TFR	SCREW	4	
4-57	XTV3+10J	SCREW	2	

#### 5. Casing Parts Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
5-1	VGM1048	SIDE PANEL (LEFT)	1	
5-2	VGM1047	TOP PANEL	1	
5-3	VMX2248	TOP PANEL SPACER	1	
5-4	VMX0871	TOP PANEL SPACER	1	
5-5	VJF0004	MINI CLAMPER	2	
5-6	VMP4225	C.B. HOLDER (1)	1	
5-7	VMP4226	C.B. HOLDER (2)	1	
5-8	VKA0117	RUBBER FOOT	4	
5-9	VXA4551	SUPPORT ANGLE UNIT	2	
5-10	VJF0013	MINI CLAMPER	1	
5-11	VMJ04CH150CA	FLAT CABLE	1	
5-13	VGU6485	OPERATION BUTTON	4	
5-14	VKC0423	OPERATION BUTTON HOLDER	1	
5-15	VGF0508	SLIDE KNOB SHEET	10	
5-16	VMP3226	KNOB HOLD ANGLE	1	
5-17	VGU5603	SLIDE KNOB	10	
5-18	VGU6483	COUNTER BUTTON	1	
5-19	VGL0508	REV. PANELIGHT	1	
5-20	VGL0506	FWD PANELIGHT	1	
5-21	VGM1049	SIDE PANEL (RIGHT)	1	
5-22	VMP3225	FRONT SUPPORT ANGLE	1	
5-23	VKW1501	POWER SWITCH COVER	1	
5-24	VGU6482	VR KNOB	4	
5-25	VKW1839	OPERATION AREA COVER	1	
5-26	VGU4604	JOG DIAL KNOB	1	
5-27	VMC0444	KNOB SPRING	1	
5-28	VMG0476	SEARCH DIAL RUBBER	1	
5-29	VGU4605	SEARCH DIAL KNOB	1	
5-30	VKM3678	BOTTOM PLATE	1	
5-31	VES0703	POWER SWITCH UNIT	1	
5-32	VJF0726	C.B. SUPPORT	2	
5-33	VMG0477	VR KNOB CAP	4	
5-34	VYP5447	FRONT PANEL UNIT	1	
5-35	VJF0004	MINI CLAMPER	2	
5-36	VMP3648	EARTH PLATE (LEFT)	1	
5-37	VMP3650	MIC EARTH PLATE	1	
5-38	VMP3649	EARTH PLATE (RIGHT)	1	
5-40	VHD0426	SCREW	8	
5-41	VHD0222	SCREW	2	
5-42	XTV3+16G	SCREW	4	
5-43	XTV3+10J	SCREW	6	
5-44	XTV4+8F	SCREW	2	
5-45	XTV4+10JFR	SCREW	5	
5-46	XTV3+8J	SCREW	5	
5-47	VHD0679	SCREW	1	
5-48	VMX1558	STOPPING WASHER	1	
5-49	VHD0059	SCREW	9	
5-50	XWC48FY	WASHER (M4)	1	
5-51	XTV4+12J	SCREW	1	
5-52	XTV3+8F	SCREW	2	
5-53	XTV26+8FR	SCREW	4	
5-54	XTV3+10JFR	SCREW	16	
5-55	XYN3+8FR	SCREW	4	
5-56	XYE3+EF6	SCREW	3	

#### 5 Casing Parts Section





This exploded view diagram illustrates the assembly of a portable electronic device. The components are numbered 1 through 10:

- 1**: The main rectangular base or chassis.
- 2**: A long, thin rectangular component, likely a battery pack or a structural frame member.
- 3**: A smaller rectangular component, possibly a control panel or a display unit.
- 4**: A small rectangular component, likely a connector or a plug.
- 5**: A long, thin rectangular component, similar to part 2, possibly another battery pack or frame member.
- 6**: A rectangular component with a protruding section, likely a connector or a plug.
- 7**: A small, oval-shaped component, possibly a button or a switch.
- 8**: A cable with a connector, likely for data or power transfer.
- 9**: A cylindrical component, possibly a battery or a power source.
- 10**: A rectangular component, likely a cover or a display screen.

The diagram shows the relative positions and orientations of these components, indicating how they fit together to form the complete assembly.

## 6. Packing Parts Section

[illegible]

PRT-14



## ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E6	VEP03A67A	P.C.BOARD W/COMPONENT VIDEO DIGITAL	1	(RTL)<R>	E31	VEP04425A	P.C.BOARD W/COMPONENT XLR F	1	(RTL)<R>
E13	VEP08166A	P.C.BOARD W/COMPONENT VIDEO C	1	(RTL)<R>	E33	VEP06906A	P.C.BOARD W/COMPONENT 9P IN CONNECT	1	(RTL)<R>
E9	VEP06903A	P.C.BOARD W/COMPONENT INTERFACE	1	(RTL)<R>	E28	VEP06908A	P.C.BOARD W/COMPONENT REAR AMP	1	(RTL)<R>
E10	VEP06913A	P.C.BOARD W/COMPONENT TIME CORD	1	(RTL)<R>	E29	VEP06909A	P.C.BOARD W/COMPONENT REAR JACK	1	(RTL)<R>
E1	VEP01559A	P.C.BOARD W/COMPONENT POWER (1)	1	(RTL)<R>	E25	VEK2657	P.C.BOARD W/COMPONENT TENSION SENSOR UNIT	1	(RTL)<R>
E2	VEP01560A	P.C.BOARD W/COMPONENT POWER (2)	1	(RTL)<R>	E26	VEK4265	P.C.BOARD W/COMPONENT REV TENSION SENSOR UNIT	1	(RTL)<R>
E21	VEP04328A	P.C.BOARD W/COMPONENT AUDIO METER	1	(RTL)<R>	E24	VEK4058	P.C.BOARD W/COMPONENT PHOTO TR (R) UNIT	1	(RTL)<R>
E19	VEP04418A	P.C.BOARD W/COMPONENT FRONT JACK	1	(RTL)<R>	E23	VEK3578	P.C.BOARD W/COMPONENT PHOTO TR (L) UNIT	1	(RTL)<R>
E4	VEP00T59A	P.C.BOARD W/COMPONENT MOTHER	1	(RTL)<R>	E27	VEK6633	P.C.BOARD W/COMPONENT MOTOR BASE	1	(RTL)<R>
E32	VEP01478C	P.C.BOARD W/COMPONENT POWER CONNECT	1	(RTL)<R>	E22	VEK5556	P.C.BOARD W/COMPONENT SEARCH DIAL UNIT	1	(RTL)<R>
E14	VEP02417A	P.C.BOARD W/COMPONENT REEL DRIVE	1	(RTL)<R>					
E5	VEP03A66A	P.C.BOARD W/COMPONENT VIDEO I/O	1	(RTL)<R>					
E104	VEP03B37A	P.C.BOARD W/COMPONENT VIDEO I/O SUB (1)	1	(RTL)<R> FOR VEP03A66A					
E20	VEP04419A	P.C.BOARD W/COMPONENT MIC JACK	1	(RTL)<R>					
E7	VEP04420A	P.C.BOARD W/COMPONENT AUDIO (1)	1	(RTL)<R>					
E8	VEP04421A	P.C.BOARD W/COMPONENT AUDIO (2)	1	(RTL)<R>					
E15	VEP05162H	P.C.BOARD W/COMPONENT HEAD AMP	1	(RTL)<R>					
E16	VEP06902B	P.C.BOARD W/COMPONENT FRONT	1	(RTL)<R>					
E17	VEP06929A	P.C.BOARD W/COMPONENT FRONT LED	1	(RTL)<R> FOR VEP06902B					
E18	VEP06962A	P.C.BOARD W/COMPONENT KEY BOARD	1	(RTL)<R> FOR VEP06902B					
E3	VEP06904A	P.C.BOARD W/COMPONENT SERVO & SYSTEM CONTROL	1	(RTL)<R>					
E102	VEP00U59A	P.C.BOARD W/COMPONENT POWER DET SUB	1	(RTL)<R> FOR VEP06904A					
E103	VEP00U84A	P.C.BOARD W/COMPONENT SERVO SUB (2)	1	(RTL)<R> FOR VEP06904A					
E11	VEP08159A	P.C.BOARD W/COMPONENT TBC (1)	1	(RTL)<R>					
E12	VEP08160A	P.C.BOARD W/COMPONENT TBC (2)	1	(RTL)<R>					
E30	VEP04424A	P.C.BOARD W/COMPONENT XLR M	1	(RTL)<R>					



# MECHANICAL PARTS ON P.C.BOARDS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP03A67A	P.C.BOARD W/COMPONENT VIDEO DIGITAL				VEP03A66A	P.C.BOARD W/COMPONENT VIDEO I/O		
E48	VMZ2228	INSULATOR	1			VEP03A37B	P.C.BOARD W/COMPONENT I/O SUB (1)		
E49	VSC3973	SHIELD PLATE	1		E48	VMZ2228	INSULATION SHEET	1	
E50	XTV3+6FFR	SCREW	2		E49	VSC3973	SHIELD PLATE	1	
					E50	XTV3+6FFR	SCREW	2	
	VEP01559A	P.C.BOARD W/COMPONENT POWER (1)				VEP04419A	P.C.BOARD W/COMPONENT MIC JACK		
E35	VJF0318	FUSE HOLDER	2		E62	VSC3429	SHIELD CASE	1	
E36	VMZ0429	FUSE COVER	1	<I>	E63	VMP3224	MIC JACK ANGLE	1	
E37	VMZ0965	CAPACITOR COVER	1	<I>					
E44	VMZ1798	CAPACITOR COVER	1	<I>		VEP04420A	P.C.BOARD W/COMPONENT AUDIO (1)		
E45	VMZ1608	CAPACITOR COVER	2	<I>	E67	VSC3967	SHIELD COVER (UPPER)	1	
					E68	VSC3968	SHIELD COVER (MIDDLE)	1	
	VEP01560A	P.C.BOARD W/COMPONENT POWER (2)			E69	VSC3969	SHIELD COVER (LOWER)	1	
E51	VSC3434	HEAT SINK	1		E71	VSC3971	SHIELD COVER (MIDDLE)	1	
E52	XYN3+F8	SCREW	1		E72	VSC3972	SHIELD COVER (LOWER)	1	
	VEP04328A	P.C.BOARD W/COMPONENT AUDIO METER				VEP05162H	P.C.BOARD W/COMPONENT HEAD AMP		
E54	VMP3282	METER ANGLE	1		E64	VSC3119	SHIELD COVER (MIDDLE)	1	
E55	VGFO245	AUDIO METER HOLDER	2		E65	VSC3039	SHIELD COVER (FRONT)	1	
E56	VSE0117	CH1 METER	1	<R>	E66	VSC3040	SHIELD COVER (REAR)	1	
E57	VSE0115	CH2 METER	1	<R>					
						VEP06902B	P.C.BOARD W/COMPONENT FRONT		
	VEP04418A	P.C.BOARD W/COMPONENT FRONT JACK				VEP06929A	P.C.BOARD W/COMPONENT FRONT LED		
E59	VMP4231	FRONT JACK ANGLE	1			VEP06962A	P.C.BOARD W/COMPONENT KEY BOARD		
E60	VGU6484	VR KNOB	4		E43	VMX0985	P.C.B. SPACER	1	
E61	VMP3148	WASHER WITH WIRE	1		E73	VJF0960	DISPLAY TUBE HOLDER	1	
					E74	VMX2062	LED SPACER	2	
	VEP00T59A	P.C.BOARD W/COMPONENT MOTHER			E75	VMS5528	P.C.B. SUPPORT	5	
E38	VMP4222	ANGLE (1)	1		E76	VMS4950	P.C.B. SUPPORT	2	
E39	VMP4223	ANGLE (2)	1		E77	VWJ10SW050LO	FLEXIBLE CABLE	1	
E43	VMX0985	SPACER	1		E78	VWJ18XW040L1	FLEXIBLE CABLE	1	
E42	VJF0816	MINI CLAMPER	1		E79	XYN26+C5FR	SCREW	14	
E41	XYE3+EF8	SCREW	17						
E40	XTV26+8J	SCREW	14						
						VEP06904A	P.C.BOARD W/COMPONENT SERVO & SYSTEM CONTROL		
	VEP01478C	P.C.BOARD W/COMPONENT POWER CONNECT				VEP00U59A	P.C.BOARD W/COMPONENT POWER DET SUB		
E46	VMZ1305	CAPACITANCE COVER	2			VEP00U84A	P.C.BOARD W/COMPONENT SERVO SUB (2)		
					E43	VMX0985	P.C.B. SPACER	2	
	VEP02417A	P.C.BOARD W/COMPONENT REEL DRIVE			E52	XYN3+F8	SCREW	2	
E47	VMX2183	P.C.B. SPACER	1		E80	VSC4042	HEAT SINK	2	
E96	VWJ04CN150CA	FLAT CABLE	1		E84	VMC0493	HEAT SINK ANGLE	1	
E97	VWJ18AW105M1	FLEXIBLE CABLE	1		E82	VMC0075	HEAT SINK ANGLE	1	
					E81	VSC1215	HEAT SINK	2	
					E42	VJF0816	MINI CLAMPER	1	







# ELECTRICAL PARTS

Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
	[VEP03A67A]		C3825	ECUM1H103KBN	1	D3801	MA729	1	L3823-25	VLQ0319K100	3	R3720	ERJ6GEYJ472	1
	VIDEO DIGITAL		C3826	ECEVOJV220S	1	D3811-14	MA704	4	L3901	VLQ0319K101	1	R3722	ERJ6GEYJ103	1
			C3827, 28	ECUM1E104ZFN	2	D3902	MA151K	1	L3951, 52	VLQ0319K100	2	R3723	ERJ6GEYJ472	1
			C3829, 30	ECEVOJV220S	2	D3961	31DQ04	1				R3771	ERJ6GEYJ103	1
C3601	ECEVOJV470S	1	C3831	ECUM1E104ZFN	1				P3932	VJP3176B064	1	R3772	ERJ6GEYJ223	1
C3602, 03	ECUM1H103KBN	2	C3832	ECEVOJV220S	1	FL3601	VLQ1016A223	1	P3961, 62	VJS28480D18	2	R3773	ERJ6GEYJ103	1
C3604	ECEVOJV470S	1	C3833	ECUM1H103KBN	1	FL3822, 23	VLQ1016A223	2	P3963	VJP1233T	1	R3774	ERJ6GEYJ152	1
C3606-13	ECUM1E104ZFN	8	C3834	ECEVOJV470S	1	FL3961-64	VLQ1016A470	4				R3775	ERJ6GEYJ103	1
C3615	ECUM1E104ZFN	1	C3835	ECUM1H103KBN	1	FL3965-69	VLQ1016A101	5	Q3691	MSB709-R	1	R3776	ERJ6GEYJ102	1
C3617-21	ECUM1E104ZFN	5	C3836	ECUM1H220JCN	1	FL3970, 71	VLQ1016A470	2	Q3693	MSB709-R	1	R3777	ERJ6GEYJ222	1
C3622	ECUM1H680JCN	1	C3837	ECUM1H682KBN	1	FL3975	VLQ1016A470	1	Q3701-03	MSD601-R	3	R3778	ERJ6GEYJ223	1
C3651	ECUM1E104ZFN	1	C3838	ECUM1H050CCN	1	FL3976	VLQ1016A101	1	Q3771-73	MSD601-R	3	R3779, 80	ERJ6GEYJ102	2
C3652	ECUM1H103KBN	1	C3839	ECUM1H103KBN	1	FL3978-80	VLQ1016A101	3	Q3774	MSB709-R	1	R3781	ERJ6GEYJ473	1
C3654	ECEVICV100S	1	C3840	ECEVOJV470S	1	FL3981	VLQ1016A470	1	Q3783	2SD1328-S	1	R3782	ERJ6GEYJ152	1
C3655	ECEVOJV470S	1	C3841	ECUM1H020CCN	1	FL3982, 83	VLQ1016A101	2	Q3784	MSD601-R	1	R3784	ERJ6GEYJ222	1
C3656-58	ECUM1E104ZFN	3	C3842	ECUM1H222KBN	1				Q3801	2SD1030-S	1	R3786	ERJ6GEYJ221	1
C3659	ECUM1H101JCN	1	C3843-48	ECUM1H103KBN	6	IC3601	CXD2105AQ	1	Q3802	MSC2295-B	1	R3788	ERJ6GEYJ152	1
C3671	ECEVICV470S	1	C3849	ECEVOJV470S	1	IC3602	SN74LS221NS	1	Q3803	MSD601-R	1	R3789	ERJ6GEYJ223	1
C3672	ECUM1H102JCN	1	C3850	ECUM1H103KBN	1	IC3606	TC7W04F	1	Q3804	MSC2295-B	1	R3790	ERJ6GEYJ561	1
C3673, 74	ECUM1H103KBN	2	C3851	ECUM1H270JCN	1	IC3607	MC74HC163AF	1	Q3805-08	MSD601-R	4	R3791	ERJ6GEYJ472	1
C3675	ECUM1H060DCN	1	C3852	ECUM1H680JCN	1	IC3655	CXD1175AM	1	Q3809	MSC2295-B	1	R3792	ERJ6GEYJ102	1
C3676	ECUM1H103KBN	1	C3853	ECUM1H103KBN	1	IC3671	MS7003MS	1	Q3810	MN1404	1	R3793, 94	ERJ6GEYJ103	2
C3677	ECEVOJV470S	1	C3854	ECUM1H101JCN	1	IC3691	MC74HC74AF	1	Q3951, 52	MSD601-R	2	R3795	ERJ6GEYJ473	1
C3691, 92	ECUM1H121JCN	2	C3857	ECUM1H101JCN	1	IC3701	TA7357P	1				R3801, 02	ERJ6GEYJ105	2
C3693	ECUM1H330JCN	1	C3860	ECUM1H103KBN	1	IC3702	MC74HC86F	1	QR3704, 05	MN1404	2	R3803	ERJ6GEYJ103	1
C3694-96	ECUM1H121JCN	3	C3861	ECEVOJV470S	1	IC3703	MC74HC74AF	1	QR3772	MN1404	1	R3804	ERJ6GEYJ105	1
C3697	ECUM1H103KBN	1	C3862	ECUM1E104ZFN	1	IC3704	MC74HC00AF	1				R3806	ERJ6GEYJ105	1
C3701	ECUM1H103KBN	1	C3863	ECEVOJV220S	1	IC3771	MC14053BF	1	R3601	ERJ6GEYOR00	1	R3808	ERJ6GEYOR00	1
C3702	ECEVOJV470S	1	C3864	ECUM1H103KBN	1	IC3781	AN6336S	1	R3603	ERJ6GEYOR00	1	R3809	ERJ6GEYJ101	1
C3703	ECUM1H103KBN	1	C3865	ECEVOJV470S	1	IC3782	MC74HC74AF	1	R3605	ERJ6GEYOR00	1	R3810	ERJ6GEYJ222	1
C3704	ECEVOJV470S	1	C3866	ECUM1H103KBN	1	IC3783	MC14517BCP	1	R3610	ERJ6GEYOR00	1	R3813	ERJ6GEYOR00	1
C3705	ECUM1H101JCN	1	C3867	ECEVICV100S	1	IC3801	MN6711A	1	R3612	ERJ6GEYJ221	1	R3815-17	ERJ6GEYJ105	3
C3706	ECUM1H271JCN	1	C3868	ECUM1H103KBN	1	IC3802	MN6712	1	R3613	ERJ6GEYJ472	1	R3818	ERJ6GEYJ222	1
C3707	ECEVOJV470S	1	C3869	ECUM1E104ZFN	1	IC3803	MN67101	1	R3614	ERJ6GEYJ102	1	R3820	VRE0034E103	1
C3708	ECUM1E104ZFN	1	C3870, 71	ECEVOJV220S	2	IC3804	MN67102	1	R3615, 16	ERJ6GEYJ332	2	R3821	ERJ6GEYJ472	1
C3709	ECUM1E473KBN	1	C3872, 73	ECUM1E104ZFN	2	IC3805	MN67103	1	R3617	ERJ6GEYJ472	1	R3822	ERJ6GEYJ103	1
C3710	ECUM1H561JCN	1	C3874	ECEVOJV220S	1	IC3806, 07	MB40558PF	2	R3618	ERJ6GEYJ102	1	R3823	ERJ6GEYJ683	1
C3711	ECUM1H103KBN	1	C3875	ECUM1E104ZFN	1	IC3808	MN6570F	1	R3619	ERJ6GEYJ221	1	R3829	ERJ6GEYJ222	1
C3712	ECEVICV470S	1	C3876, 77	ECEVOJV220S	2	IC3810	MC4044M	1	R3620	ERJ6GEYOR00	1	R3830	VRE0034E562	1
C3714	ECUM1H150JCN	1	C3878	ECUM1E104ZFN	1	IC3811	MC74HC04AF	1	R3623	ERJ6GEYOR00	1	R3831	ERJ6GEYOR00	1
C3715	ECUM1H103KBN	1	C3879	ECEVOJV220S	1	IC3812	AN3915S	1	R3625, 26	ERJ6GEYOR00	2	R3832	VRE0034E562	1
C3716	ECUM1E104ZFN	1	C3880	ECUM1E104ZFN	1	IC3813	TC7W04F	1	R3629	ERJ6GEYOR00	1	R3835	ERJ6GEYJ103	1
C3717	ECUM1H103KBN	1	C3881	ECUM1H100DCN	1	IC3814	MN13821-S	1	R3631	ERJ6GEYOR00	1	R3836	ERJ6GEYJ102	1
C3771	ECEVICV100S	1	C3884	ECUM1E104ZFN	1	IC3815	UPD650256122	1	R3636	ERJ6GEYJ333	1	R3837	ERJ6GEYJ154	1
C3772, 73	ECUM1H103KBN	2	C3885-87	ECUM1H103KBN	3	IC3816	TC7W04F	1	R3642	ERJ6GEYJ102	1	R3838	ERJ6GEYJ333	1
C3775	ECUM1H101JCN	1	C3889, 90	ECUM1H103KBN	2	IC3817	SN74LS221NS	1	R3643	ERJ6GEYJ101	1	R3839	ERJ6GEYJ103	1
C3776	ECUM1H150JCN	1	C3891	ECEVOJV220S	1	IC3818	MC74HC00AF	1	R3644	ERJ6GEYJ105	1	R3840, 41	ERJ6GEYJ223	2
C3777	ECUM1H120JCN	1	C3892	ECUM1E104ZFN	1	IC3901	MN170804VMFA	1	R3651	ERJ6GEYJ102	1	R3842	ERJ6GEYJ122	1
C3778	ECUM1H470JCN	1	C3893	ECUM1H103KBN	1	IC3902	MN13821-S	1	R3652	ERJ6GEYJ473	1	R3843	ERJ6GEYJ391	1
C3779, 80	ECUM1H103KBN	2	C3894	ECUM1E104ZFN	1	IC3903	TC7W00F	1	R3656	ERJ6GEYOR00	1	R3844	ERJ6GEYJ222	1
C3781	ECEVOJV470S	1	C3895	ECUM1H103KBN	1	IC3921	MC74HC157AF	1	R3659	ERJ6GEYOR00	1	R3845	ERJ6GEYJ333	1
C3782	ECEVICV100S	1	C3901	ECUM1H103KBN	1	IC3922	MC74HC163AF	1	R3661	ERJ6GEYJ103	1	R3846	ERJ6GEYJ183	1
C3783-85	ECUM1H103KBN	3	C3902	ECEVOJV470S	1	IC3923	MC74HC32AF	1	R3671	VRE0034E361	1	R3847	ERJ6GEYJ102	1
C3786	ECUM1H560JCN	1	C3903	ECEVICV470S	1	IC3924	HM63021FP	1	R3672	ERJ6GEYJ392	1	R3848	ERJ6GEYJ561	1
C3787	ECUM1E104ZFN	1	C3921-24	ECUM1H103KBN	4	IC3925	TC7S04F	1	R3689	ERJ6GEYJ182	1	R3849	ERJ6GEYJ101	1
C3793	ECUM1H103KBN	1	C3951	ECUM1H103KBN	1	IC3951	MN6570F	1	R3691	ERJ6GEYJ562	1	R3850	ERJ6GEYJ222	1
C3801, 02	ECUM1E104ZFN	2	C3952	ECEVOJV470S	1				R3693	ERJ6GEYOR00	1	R3851, 52	ERJ6GEYJ223	2
C3803	ECUM1H103KBN	1	C3953	ECUM1H103KBN	1	L3601	VLQ0319K101	1	R3694	ERJ6GEYJ222	1	R3853	ERJ6GEYJ333	1
C3805, 06	ECUM1H103KBN	2	C3954	ECUM1E104ZFN	1	L3671	VLQ0319K101	1	R3695	ERJ6GEYJ472	1	R3854	ERJ6GEYJ153	1
C3807	ECEVOJV470S	1	C3955	ECEVOJV220S	1	L3691, 92	VLQ0163J3R3	2	R3696	ERJ6GEYJ272	1	R3855	ERJ6GEYJ122	1
C3808	ECUM1H103KBN	1	C3956	ECEVICV100S	1	L3693	VLQ0163J221	1	R3697	ERJ6GEYJ102	1	R3856	ERJ6GEYJ471	1
C3809	ECEVICV3R3S	1	C3957, 58	ECUM1H103KBN	2	L3701, 02	VLQ0319K101	2	R3698	ERJ6GEYJ470	1	R3857	ERJ6GEYJ222	1
C3811	ECUM1E104ZFN	1	C3959	ECEVOJV470S	1	L3771, 72	VLQ0319K101	2	R3699	ERJ6GEYJ472	1	R3858, 59	ERJ6GEYJ223	2
C3812	ECEVICV3R3S	1	C3961-72	ECUM1H103KBN	12	L3773	VLQ0133J471	1	R3701	ERJ6GEYJ101	1	R3860, 61	ERJ6GEYJ102	2
C3813	ECUM1H103KBN	1	C3982	ECUM1H103KBN	1	L3779	VLQ0163J390	1	R3702	ERJ6GEYJ102	1	R3862	ERJ6GEYOR00	1
C3814	ECEVOJV470S	1	C3984	ECUM1H103KBN	1	L3801-03	VLQ0163J33	3	R3704	ERJ6GEYJ222	1	R3865	ERJ6GEYJ562	1
C3815	ECUM1H103KBN	1	C3986	ECUM1H103KBN	1	L3804-06	VLQ0319K100	3	R3705	ERJ6GEYJ124	1	R3866	ERJ6GEYJ561	1
C3816	ECUM1H120JCN	1	C3987	ECEVOJV470S	1	L3808	VLQ0319K100	1	R3706	ERJ6GEYJ123	1	R3867	ERJ6GEYJ682	1
C3817	ECUM1H103KBN	1	C3988	ECUM1H103KBN	1	L3810	VLQ0319K330	1	R3707	ERJ6GEYJ474	1	R3868	VRE0034E271	1
C3819	ECUM1E104ZFN	1				L3811	VLQ0319K688	1	R3708	ERJ6GEYJ472	1	R3869	ERJ6GEYOR00	1
C3820	ECEVICV3R3S	1	D3601	MA151K	1	L3812, 13	VLQ0319K330	2	R3709	ERJ6GEYJ473	1	R3870	ERJ6GEYJ101	1
C3821	ECUM1H103KBN	1	D3655, 56	MA704	2	L3814	VLQ0163J270	1	R3710	ERJ6GEYJ105	1	R3871	ERJ6GEYJ222	1
C3822	ECEVOJV470S	1	D3701	MA153	1	L3815	VLQ0319K680	1	R3713	ERJ6GEYOR00	1	R3872	ERJ6GEYJ121	1
C3823	ECUM1H103KBN	1	D3702	MA151K	1	L3818, 19	VLQ0319K100	2	R3714	ERJ6GEYJ473	1	R3873	ERJ6GEYJ331	1
C3824	ECUM1H120JCN	1	D3706	MA151K	1	L3821	VLQ0319K100	1	R3717	ERJ6GEYJ333	1	R3874-80	ERJ6GEYJ102	7



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
R3881-87	ERJ6GEYJ222	7	C9207	ECUM1H220JCN	1	C9473-77	ECUM1H103ZFN	5	R9204	ERJ6GEYJ472	1	R9468	ERJ6GEYJ472	1
R3888	ERJ6GEYJ151	1	C9208-10	ECEA1CKA100	3	C9478,79	ECUM1E104ZFN	2	R9205	ERJ6GEYJ183	1	R9469	ERJ6GEYJ152	1
R3890	ERJ6GEYOR00	1	C9211	ECUM1H103ZFN	1	C9481	ECUM1H222KBN	1	R9206	ERJ6GEYJ101	1	R9470	ERJ6GEYJ102	1
R3893	ERJ6GEYJ223	1	C9212	ECUM1E104ZFN	1	C9482	ECUM1H330JCN	1	R9207	ERJ6GEYJ561	1	R9473	ERJ6GEYJ123	1
R3894	ERJ6GEYJ333	1	C9213	ECUM1H103ZFN	1	C9483	ECUM1H101JCN	1	R9208	ERJ6GEYJ151	1	R9475	ERJ6GEYJ103	1
R3901	ERJ6GEYJ473	1	C9214	ECEA1CKA101	1	C9485	ECEA1CKA220	1	R9209	ERJ6GEYJ472	1	R9477	ERJ6GEYJ103	1
R3902-05	ERJ6GEYJ332	4	C9215	ECEA1CKA100	1	C9486	ECEA0JKA470	1	R9210	ERJ6GEYJ681	1	R9478	ERJ6GEYJ271	1
R3911	ERJ6GEYJ105	1	C9216	ECUM1E104ZFN	1	C9488	ECUM1H103ZFN	1	R9211	ERJ6GEYJ221	1	R9479,80	ERJ6GEYJ152	2
R3912	ERJ6GEYJ103	1	C9217,18	ECUM1H103ZFN	2	C9489,90	ECEA0JKA470	2	R9212	ERJ6GEYJ473	1	R9482	ERJ6GEYJ222	1
R3913-15	ERJ6GEYJ105	3	C9219	ECEA0JKA470	1				R9213	ERJ6GEYJ221	1	R9483	ERJ6GEYJ103	1
R3916	ERJ6GEYJ103	1	C9220	ECUM1E104ZFN	1	D9001	11EQS04	1	R9214	ERJ6GEYJ473	1	R9484	ERJ6GEYJ222	1
R3918,19	ERJ6GEYJ105	2	C9221	ECEA1HKA0R1	1	D9221	MA151K	1	R9215	ERJ6GEYJ104	1	R9485	ERJ6GEYJ223	1
R3921-24	ERJ6GEYJ473	4	C9222	ECUM1E104ZFN	1	D9493	MA151K	1	R9216	ERJ6GEYJ222	1	R9486	ERJ6GEYJ822	1
R3925-28	ERJ6GEYOR00	4	C9223	ECEA1EKA4R7	1				R9217	ERJ6GEYJ271	1	R9489	ERJ6GEYJ103	1
R3933	ERJ6GEYJ103	1	C9224	ECUM1H223KBN	1	DL9401	VLD0269	1	R9218	ERJ6GEYJ272	1	R9490	ERJ6GEYJ223	1
R3935	ERJ6GEYJ103	1	C9225	ECEA0JKA470	1				R9219	ERJ6GEYJ822	1	R9491	ERJ6GEYJ561	1
R3937-39	ERJ6GEYJ103	3	C9226	ECUM1E104ZFN	1	FL9401	VLF0894	1	R9220	ERJ6GEYJ152	1	R9492	ERJ6GEYOR00	1
R3942	ERJ6GEYJ103	1	C9227	ECUM1H680JCN	1	FL9402	VLF1046	1	R9221,22	ERJ6GEYJ103	2	R9493	ERJ6GEYJ471	1
R3944	ERJ6GEYJ103	1	C9228	ECUM1E104ZFN	1				R9223	ERJ6GEYJ102	1	R9494	ERJ6GEYJ102	1
R3948	ERJ6GEYJ103	1	C9229	ECUM1H180JCN	1	IC9101,02	UPD42280G3	2	R9224	ERJ6GEYJ333	1	R9498	ERJ6GEYJ103	1
R3951	VRE0034E201	1	C9230	ECUM1E104ZFN	1	IC9103	UPD6480GF	1	R9225	ERJ6GEYJ103	1	R9499	ERJ6GEYOR00	1
R3952	VRE0034E101	1	C9231	ECUM1H103ZFN	1	IC9104	UPC664GS	1	R9226	ERJ6GEYJ223	1	R9502	ERJ6GEYJ221	1
R3953,54	ERJ6GEYJ222	2	C9232	ECUM1E104ZFN	1	IC9105	UPD6481GC	1	R9227	ERJ6GEYJ103	1	R9503,04	ERJ6GEYJ333	2
R3955	ERJ6GEYJ682	1	C9233	ECEA0JKA470	1	IC9201	UPC659G	1	R9228	ERJ6GEYJ122	1			
R3956	ERJ6GEYJ561	1	C9234	ECUM1E104ZFN	1	IC9202	UPC1860GS	1	R9229	ERJ6GEYJ561	1	VR9401	EVN32CA00B23	1
R3957	ERJ6GEYJ562	1	C9235	ECEA0JKA470	1	IC9204	TC7508F	1	R9230,31	ERJ6GEYJ103	2	VR9402	EVN32CA00B14	1
R3958	ERJ6GEYOR00	1	C9236,37	ECUM1H103ZFN	2	IC9222	AN78N05	1	R9232	ERJ6GEYJ681	1	VR9403	EVN32CA00B24	1
R3961-67	ERJ6GEYOR00	7	C9238	ECUM1H102JCN	1	IC9401	NJM2233BMA	1	R9234	ERJ6GEYJ391	1	VR9405-07	EVN32CA00B53	3
R3968	ERJ6GEYJ820	1	C9239	ECEA1HKA010	1	IC9402	TK16031MTL	1	R9235	ERJ6GEYJ330	1	VR9410	EVN32CA00B23	1
R3969-73	ERJ6GEYJ101	5	C9240	ECUM1H103ZFN	1	IC9403	MS2350FP	1	R9236	ERJ6GEYJ391	1			
R3974,75	ERJ6GEYOR00	2	C9241	ECEA1HKA010	1	IC9404	NJM2283M	1	R9237,38	ERJ6GEYJ102	2	X9201	VSX0549	1
R3976-78	ERJ6GEYJ101	3	C9242	ECUM1H221JCN	1	IC9405	AN78N05	1	R9239	ERJ6GEYOR00	1	X9202	VSX0330	1
R3979	ERJ6GEYJ820	1	C9243	ECUM1H152KBN	1	IC9410	AN6366NS	1	R9240	ERJ6GEYJ473	1	X9401	VSX0160	1
R3980	ERJ6GEYOR00	1	C9244,45	ECUM1H103ZFN	2	IC9421	UPC393G	1	R9401	ERJ6GEYJ152	1			
R3981-87	ERJ6GEYJ101	7	C9246	ECEA0JKA470	1				R9402	ERJ6GEYJ102	1			
R3988	ERJ6GEYJ222	1	C9247	ECEA1EKA4R7	1	L9001	VLP0133	1	R9403	ERJ6GEYJ153	1			
R3989	ERJ6GEYJ101	1	C9250	ECUM1H101JCN	1	L9101,02	VLQ0460	2	R9404	ERJ6GEYJ152	1			
R3991	ERJ6GEYOR00	1	C9251	ECUM1H470JCN	1	L9201	VLQEL05K100J	1	R9405	ERJ6GEYJ221	1			
R3993	ERJ6GEYJ101	1	C9401	ECEA1CKA100	1	L9202-05	VLQ0460	4	R9406	ERJ6GEYJ102	1			
			C9402	ECUM1H103ZFN	1	L9401,02	VLQ0460	2	R9407	ERJ6GEYJ222	1			
SW3921	VSR0045	1	C9403	ECEA1CKA100	1	L9404	VLQEL05K680J	1	R9408	ERJ6GEYOR00	1			
			C9404	ECUM1H270JUN	1	L9407,08	VLQ0460	2	R9419	ERJ6GEYJ103	1	C61001	ECUM1H103ZFN	1
VR3771	VRV0161B202	1	C9405	ECUM1H103ZFN	1	L9409	VLQEL05K390J	1	R9420	ERJ6GEYJ223	1	C61002,03	ECUM1H150JCN	2
			C9406	ECUM1H150JCN	1	L9414	VLQEL05K101J	1	R9421	ERJ6GEYJ221	1	C61004	ECEA0JU101	1
X3801	VSX0353	1	C9407	ECUM1H120JCN	1				R9422	ERJ6GEYJ222	1	C61005-07	ECUM1H103ZFN	3
X3901	VSX0176	1	C9408	ECUM1H470JCN	1	P9461,62	VJS2907D018	2	R9423	ERJ6GEYOR00	1	C61008	ECEA0JU471	1
			C9414	ECUM1H180JCN	1	P9463	VJP1246T	1	R9424	ERJ6GEYJ332	1	C61009,10	ECUM1H680JCN	2
			C9418	ECUM1H103ZFN	1				R9425	ERJ6GEYJ183	1	C61011	ECUM1H103ZFN	1
			C9422	ECEA0JKA470	1	Q9101-03	MSD601-R	3	R9426	ERJ6GEYJ105	1	C61012	ECUM1E104KBN	1
			C9423	ECUM1H103ZFN	1	Q9201-05	MSD601-R	5	R9427	ERJ6GEYJ102	1	C61013	ECEA1HU3R3	1
			C9424	ECEA0JKA470	1	Q9206	MSB709-R	1	R9429	ERJ6GEYJ222	1	C61014	ECUM1E104ZFN	1
			C9425	ECUM1H103ZFN	1	Q9401	MSC2295-B	1	R9430	ERJ6GEYJ471	1	C61015	ECEA0JU101	1
			C9426	ECUM1E104ZFN	1	Q9402	MSB709-R	1	R9431	ERJ6GEYJ102	1	C61016-21	ECUM1H103ZFN	6
			C9427,28	ECUM1H151JCN	2	Q9403	MSD601-R	1	R9432	ERJ6GEYJ272	1	C61026-29	ECUM1H103ZFN	4
			C9429	ECUM1E104ZFN	1	Q9404	MSB709-R	1	R9434	ERJ6GEYJ222	1	C61030	ECUM1E104ZFN	1
			C9430-33	ECUM1E473KBN	4	Q9408	MSD601-R	1	R9435	ERJ6GEYJ273	1	C61031-34	ECEA0JU470	4
			C9434	ECUM1H103ZFN	1	Q9410,11	MSD601-R	2	R9436	ERJ6GEYJ472	1	C61035,36	ECEA1HU010	2
			C9435	ECEA1HKA47	1	Q9413	MSD601-R	1	R9437	ERJ6GEYJ154	1	C61037-38	ECUM1H103ZFN	12
			C9436	ECUM1H153KBN	1	Q9415	MSB709-R	1	R9438	ERJ6GEYJ823	1	C61049-51	ECEA1CU100	3
			C9437	ECUM1H471JCN	1	Q9416	MSC2295-B	1	R9439	VRE0034E572	1	C61052	ECUM1E104ZFN	1
			C9438	ECUM1H121JCN	1	Q9418	MSB709-R	1	R9440	VRE0034E562	1	C61053	ECEA1CU100	1
			C9439-44	ECUM1H103ZFN	6	Q9419	MSC2295-B	1	R9441,42	ERJ6GEYJ473	2			
			C9445	ECEA0JKA101	1	Q9420,21	MSB709-R	2	R9443	ERJ6GEYJ103	1	D61001-04	11EQS04	4
			C9446,47	ECUM1H103ZFN	2				R9445,46	ERJ6GEYJ105	2	D61005-12	MA153	8
			C9448	ECEA0JKA470	1	QR9402	MRN2404	1	R9447	ERJ6GEYJ222	1			
			C9449,50	ECUM1H103ZFN	2	QR9403-05	MRN1404	3	R9448	ERJ6GEYJ681	1	FL61004	VLF0634	1
			C9451	ECUM1H273KBN	1	QR9406,07	MRN2404	2	R9449	ERJ6GEYJ152	1			
			C9453,54	ECEA1CKA100	2	QR9408	MRN1404	1	R9450	ERJ6GEYJ272	1	IC61001	HD641180XF6	1
			C9455	ECUM1H103ZFN	1				R9451	ERJ6GEYJ392	1	IC61002	VS11403	1
			C9456,57	ECEA1AKN100	2				R9458,59	ERJ6GEYJ103	2	IC61003	MBM221220	1
			C9458	ECUM1E104ZFN	1	R9101	ERJ6GEYOR00	1	R9461	ERJ6GEYJ152	1	IC61004	UPD65012FA19	1
			C9459,60	ECEA0JKA470	2	R9102,03	ERJ6GEYJ102	2	R9462	ERJ6GEYJ105	1	IC61005	TL7705CPSB	1
			C9467	ECUM1E104ZFN	1	R9105,06	ERJ6GEYJ330	2	R9464,65	ERJ6GEYJ470	2	IC61006	MC74HC4538F	1
			C9468	ECUM1H103ZFN	1	R9107-09	ERJ6GEYJ223	3	R9466	ERJ6GEYJ332	1	IC61007	MC74HC32AF	1
			C9472	ECEA1CKA100	1	R9203	ERJ6GEYJ105	1	R9467	ERJ6GEYJ682	1	IC61008	TC7W00F	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
IC61009	TC7W04F	1	C68018	ECUMIH270JCN	1	R68030	ERJ6GEYJ223	1	C1029	ECEA1CGE470	1			
IC61010	MC74HC14AF	1	C68019	ECUMIH560JCN	1	R68031	ERJ6GEYJ103	1	C1031	ECA1VFQ681	1	R4201,02	ERDS2TJ151	2
IC61011	MC34051M	1	C68020	ECEV1CV100S	1	R68032	VRE0034E272	1	C1032	ECCD2H101J	1	R4203	ERDS2TJ222	1
IC61013	MC74HC541F	1	C68021-27	ECUMIH103ZFN	7	R68034	VRE0034E153	1	C1033	ECEA1JFE560	1	R4204	ERDS2TJ272	1
IC61014	MC74HC245AF	1	C68028	ECUMIE104ZFN	1	R68036,37	ERJ6GEYJ103	2	C1036	ECA1CFZ821	1	R4205	ERDS2TJ222	1
IC61015	MC74HC541F	1	C68029,30	ECUMIH103ZFN	2	R68038	ERJ6GEYJ473	1	C1038	ECCD2H101J	1	R4206	ERDS2TJ272	1
IC61016	MC74HC138AF	1	C68031	ECUMIH050CCN	1	R68039	ERJ6GEYJ103	1	C1039	ECA1EFZ331	1	R4207,08	EROS2CKG5100	2
IC61017	MB89363BPF	1	C68032	ECUMIH560JCN	1	R68040	ERJ6GEYJ331	1				R4209,10	ERDS2TJ151	2
IC61018,9	MB86023PF	2	C68033	ECUMIH060DCN	1	R68041	ERJ6GEYJ224	1	D1005	MA723	1			
IC61020-2	MC74HC4053F	3	C68034	ECUMIH103ZFN	1	R68042,43	ERJ6GEYJ102	2	D1006	8P2M	1	VR4201-04	EVJ9MA040B14	4
IC61023	NJM2233BMA	1	C68035	ECUMIE104ZFN	1	R68044	ERJ6GEYJ223	1	D1007	VSD0002	1			
			C68036	ECEV1HV2R2S	1	R68045,46	ERJ6GEYJ123	2	D1008	FMB-24H	1			
L61001	VLQEL05S470J	1	C68037	ECEV1CV100S	1	R68047	ERJ6GEYJ103	1	D1010,11	FMLG12SP	2			
L61002	VLQ0067	1	C68038,39	ECUMIH103ZFN	2	R68048	ERJ6GEYJ105	1	D1012	VSD0001	1			
L61003-05	VLP0054	3	C68040	ECUMIH102JCN	1	R68049	ERJ6GEYJ393	1	D1013	RL27P	1			
L61006	VLP0017	1	C68041	ECUMIH103ZFN	1	R68050	ERJ6GEYJ473	1	D1014	VSD0002	1			
L61007-09	VLQEL05S470J	3	C68042	ECUMIH102JCN	1				D1015	VSD0001	1			
			C68043	ECHU1C102JA5	1	SW68001	VSS0342	1	D1016	MA4200H	1			
P61001	VJP3176B100	1	C68044	ECUMIH103ZFN	1				D1017	31DQ04	1			
P61002	VJP3088	1	C68045	ECUMIH151JCN	1	VR68001	VRV0161B203	1	D1019	RD120E	1			
P61003	VJS3406D024	1	C68046	ECEV1CV100S	1				D1020	MA4360M	1			
P61004	VJS3505C060	1	C68047	ECUMIE104ZFN	1	W68001	ERJ6GEYOR00	1						
P61009	VJP3092	1	C68048	ECUMIH102JCN	1	W68003	ERJ6GEYOR00	1	IC1001	STRM6543LF	1			
P61010	VJP3088	1				W68005	ERJ6GEYOR00	1	IC1002	TL431CLP	1			
			D68001,02	MA151K	2	W68007	ERJ6GEYOR00	1						
Q61001	MSB709-R	1	D68004,05	MA151K	2	W68009	ERJ6GEYOR00	1						
Q61002,03	MSD601-R	2				W68012-14	ERJ6GEYOR00	3						
						W68016,17	ERJ6GEYOR00	2						
R61001,02	ERJ6GEYJ152	2	IC68001	UPD78220GJ	1				L1003	VLP0074	1			
R61003,04	ERJ6GEYJ101	2	IC68002	MMS1040VPI	1				L1004	VLQ0605	1			
R61005,06	ERJ6GEYJ152	2	IC68003	MB8421-90LPPF	1	X68001	VXS0499	1	L1006	VLQ0354	1			
R61007-12	ERJ6GEYJ103	6	IC68004	M51951AML	1	X68002	VXS0498	1	L1007,08	VLQ0410	2			
R61014-30	ERJ6GEYJ103	17	IC68005,6	MC74HC32AF	2	X68003	VXS0358	1	L1009	EXCELSA35	1			
R61014-32	ERJ6GEYJ103	17	IC68007	MC74HC04AF	1									
R61032,33	ERJ6GEYJ103	2	IC68008	MC74HC32AF	1				P1002	VJP1153	1			
R61034	ERJ6GEYJ102	1	IC68009	MC74HC373AF	1				P1003	VJP3088	1			
R61035	ERJ6GEYJ472	1	IC68010	VSI1404	1									
R61036,37	ERJ6GEYJ473	2	IC68011	MC74HC4053F	1				Q1001	PS2561L1-1	1			
R61038-47	ERJ6GEYJ103	10	IC68012	AN1319S	1				Q1002	2SD1474	1			
R61048,49	ERJ6GEYJ473	2	IC68013,4	MC74HC4053F	2									
R61050	ERJ6GEYJ103	1	IC68015	TC74HC221AF	1				R1004,05	ERG3SJ563	2			
R61051-55	ERJ6GEYJ473	5	IC68016	AN6912S	1				R1006	ERDS2FJ221	1			
R61056-63	ERJ6GEYJ103	8	IC68017	UPD6500S4X36	1				R1007	ERDS2FJ270	1			
R61064	ERJ6GEYJ473	1				C1001,02	VCK0083	2	R1008	ERDS2FJ220	1			
R61065	ERJ6GEYJ103	1	IF68010	VJF1046	1	C1003	ECQU2A224MN	1	R1009	ERWLPKR18	1			
R61066-89	ERJ6GEYJ101	24				C1006	VCK0045	1	R1010	ERDS2FJ152	1			
R61094-13	ERJ6GEYJ101	20	IS68010	VJS3427X028	1				R1011	ERDS2FJ101	1			
R61114-21	ERJ6GEYJ103	8				D1001	D3SBA60	1	R1012	ERDS2FJ103	1			
R61122-37	ERJ6GEYJ101	16	L68001	VLQ0319K221	1				R1013	ERDS2TJ271	1			
R61140-58	ERJ6GEYJ101	19				F1001	XBA1C40NB5	1	R1014	ERDS2TJ561	1			
R61160-79	ERJ6GEYJ331	20				L1001	ELF18D605	1	R1015	ERDS2TKF2701	1			
R61180-82	ERJ6GEYJ101	3	P68001	VJP3507C060	1				R1016	ERDS2T0	1			
R61184,85	ERJ6GEYJ273	2	Q68001	MSB709-R	1				R1017	EROS2CKF2201	1			
R61186	ERJ6GEYJ223	1							R1018,19	ERDS2FJ333	2			
R61187	ERJ6GEYJ273	1							R1020,21	ERDS2FJ105	2			
R61188	ERJ6GEYJ511	1	R68001-03	ERJ6GEYJ473	3				R1022	ERDS2FJ224	1			
R61189	ERJ6GEYJ102	1	R68004	ERJ6GEYJ105	1				R1024	ERGLSJ271	1			
R61190	ERJ6GEYJ152	1	R68005,06	ERJ6GEYJ103	2				R1025	ERDS2FJ102	1			
R61191	ERJ6GEYJ223	1	R68007	ERJ6GEYJ222	1				R1026	VSF0078	1			
			R68008	ERJ6GEYJ103	1				R1028	ERX3SJ1R0P	1			
			R68009	ERJ6GEYJ122	1				R1030	ERDS2FJ3R9	1			
			R68010	ERJ6GEYJ562	1				R1031	EROS2TKG2703	1			
			R68011,12	ERJ6GEYJ223	2				R1033	EROS2TKG2703	1			
			R68013	ERJ6GEYJ562	1	C1008	ECES2DC821D	1	R1034,35	ERDS2FJ333	2			
			R68014	ERJ6GEYJ824	1	C1009	ECEA2AGE100	1						
			R68015,16	ERJ6GEYJ272	2	C1010	ECEA2DGE010	1						
			R68017	ERJ6GEYJ102	1	C1013	ECQE6473MZ	1						
			R68018	ERJ6GEYJ104	1	C1014	ECKD2H151KB	1						
			R68019	ERJ6GEYJ332	1	C1015	ECA1VXLV470	1						
			R68020	ERJ6GEYJ152	1	C1016	ECCF1H271J	1						
			R68021	ERJ6GEYJ394	1	C1017	ECKF1H102KB	1						
			R68022	ERJ6GEYJ751	1	C1018	ECA1CXLV221X	1						
			R68023	ERJ6GEYJ122	1	C1019	ECQB1H473JF	1						
			R68024,25	ERJ6GEYJ104	2	C1021,22	ECA1AFZ332	2						
			R68026	ERJ6GEYJ752	1	C1023	ECQV1H564JZ	1						
			R68027	ERJ6GEYJ103	1	C1024	ECA1CFQ152	1						
			R68028,29	ERJ6GEYJ123	2	C1025	ECCD2H101J	1						
						C1026	ECA1EFZ122L	1						
						C1028	ECKF1H103ZF	1						



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
			R2728	ERJ6GEYJ823	1	C3070	ECUMIH330JCN	1	C3241	ECUMIH103KBN	1	C3350	ECUMIH271JCN	1
			R2729	ERJ6GEYJ103	1	C3071	ECEVOJV470S	1	C3242	ECEVOJV470S	1	C3351	ECUMIH471JCN	1
			R2730	ERJ6GEYJ101	1	C3072-75	ECUMIH103KBN	4	C3243, 44	ECUMIE104ZFN	2	C3352	ECUMIH120JCN	1
	[VEPO2417A]		R2731	ERJ6GEYJ122	1	C3076	ECEVOJV470S	1	C3245-47	ECUMIH103KBN	3	C3353	ECUMIH103KBN	1
	REEL DRIVE		R2732	ERJ6GEYJ103	1	C3077	ECEV1HV3R3S	1	C3248, 49	ECUMIH470JCN	2	C3354	ECEVOJV470S	1
			R2733	ERJ6GEYJ102	1	C3078	ECUMIH103KBN	1	C3250	ECUMIH1000CN	1	C3355	ECUMIH103KBN	1
C2701	ECQV1H104JZ	1	R2734, 35	ERDS2TJ330	2	C3081	ECEV1HV3R3S	1	C3251	ECUMIH103KBN	1	C3356	ECUMIH103KBN	1
C2702	ECEA1EKA470	1	R2736	ERX12SJ47	1	C3085	ECUMIE104KBN	1	C3252	ECEVOJV470S	1	C3357	ECUMIH271JCN	1
C2703	ECEAOJKA470	1	R2737	ERDS2TJ330	1	C3088	ECUMIH0700CN	1	C3253	ECUMIH103KBN	1	C3358	ECUMIH820JCN	1
C2704	ECUMIH333KBN	1	R2738	ERJ6GEYJ102	1	C3089	ECUMIH1000CN	1	C3254	ECEVOJV470S	1	C3359	ECUMIH181JCN	1
C2705	ECQV1H564JZ	1	R2739	ERJ6GEYJ221	1	C3090	ECUMIE104ZFN	1	C3255	ECUMIH101JCN	1	C3360-63	ECUMIH103KBN	4
C2706-08	ECEA1HKA2R2	3	R2740	ERJ6GEYJ224	1	C3092-95	ECUMIH103KBN	4	C3256	ECUMIH271JCN	1	C3372	ECEVOJV470S	1
C2709-12	ECUMIH333KBN	4	R2741, 42	ERJ6GEYJ102	2	C3096	ECUMIE104KBN	1	C3257	ECEVOJV470S	1	C3373	ECUMIE104ZFN	1
C2713	ECEAOJKA470	1	R2743	ERJ6GEYJ223	1	C3097-99	ECUMIE104ZFN	3	C3258	ECUMIE104ZFN	1	C3374, 75	ECUMIH103KBN	2
C2714	ECEAOJKA101	1				C3100	ECUMIH121JCN	1	C3259	ECUMIE473KBN	1	C3376	ECEV1CV100S	1
C2715-17	ECEAOJKA470	3				C3101	ECUMIH180JCN	1	C3260	ECUMIH561JCN	1	C3377	ECUMIH103KBN	1
C2718	ECQV1H104JZ	1				C3102	ECUMIH332KBN	1	C3261	ECUMIH103KBN	1	C3378	ECEV1CV100S	1
C2719	ECEA1EKA470	1				C3103	ECUMIH0700CN	1	C3262	ECEV1CV470S	1	C3379	ECUMIH103KBN	1
C2720	ECEAOJKA470	1				C3104	ECUMIH820JCN	1	C3263, 64	ECUMIH390JCN	2	C3382	ECUMIH103KBN	1
C2721	ECUMIH333KBN	1		[VEPO3A66A]		C3106	ECEV1EV47S	1	C3265	ECUMIH103KBN	1	C3383	ECUMIH120JCN	1
C2722	ECQV1H564JZ	1		VIDEO I/O		C3107	ECEV1HV01S	1	C3266	ECEVOJV470S	1	C3385, 86	ECUMIH0800CN	2
C2723-25	ECEA1HKA2R2	3				C3108, 09	ECEV1HV3R3S	2	C3267, 68	ECUMIH103KBN	2	C3387	ECUMIH330JCN	1
C2726-29	ECUMIH333KBN	4				C3110-12	ECEVOJV470S	3	C3269	ECUMIH104ZFN	1			
			C3001	ECEVOJV101S	1	C3113	ECUMIH101JCN	1	C3270	ECUMIH821JCN	1	D3001	MA151K	1
			C3002	ECUMIH103KBN	1	C3114	ECUMIE104ZFN	1	C3271	ECQV1H154JZ	1	D3003-11	MA151K	9
D2701	MA151K	1	C3003	ECUMIH390JCN	1	C3115	ECUMIH151JCN	1	C3272	ECUMIE104ZFN	1	D3012	MA151WK	1
D2702	MA151WK	1	C3005	ECEVOJV220S	1	C3116	ECUMIE104ZFN	1	C3273	ECUMIH103KBN	1	D3151	MA714	1
D2703	MA151K	1	C3006	ECUMIH332KBN	1	C3118	ECEV1HV01S	1	C3274	ECUMIH101JCN	1	D3201	MA157	1
D2704	MA153	1	C3007	ECUMIH103KBN	1	C3119	ECUMIH123KBN	1	C3275	ECUMIH560JCN	1	D3202	MA151K	1
D2705	MA151K	1	C3008	ECEV1EV47S	1	C3120	ECUMIH181JCN	1	C3276	ECUMIH151JCN	1	D3203	MA714	1
D2706	MA151WK	1	C3009	ECEV1HV3R3S	1	C3125	ECUMIE104ZFN	1	C3277	ECUMIH104ZFN	1	D3204-06	MA151K	3
D2707	MA151K	1	C3010	ECUMIH101JCN	1	C3126	ECUMIH330JCN	1	C3301	ECUMIH101JCN	1	D3301	MA151K	1
D2708	MA153	1	C3011	ECUMIH122KBN	1	C3127, 28	ECUMIH0800CN	2	C3302	ECUMIH103KBN	1	D3302	MA151WA	1
			C3013	ECEV1CV470S	1	C3129	ECUMIH150JCN	1	C3303	ECEVOJV470S	1	D3303	MA151K	1
IC2701, 02	XRA6435S	2	C3014	ECUMIH103KBN	1	C3130	ECUMIE104ZFN	1	C3304, 05	ECUMIH103KBN	2	D3404	MA151K	1
IC2703	LM358PS-R	1	C3015	ECEV1CV470S	1	C3132	ECUMIE104ZFN	1	C3306	ECEV1CV100S	1			
IC2704	MC14053BF	1	C3016	ECUMIH103KBN	1	C3153	ECUMIE104ZFN	1	C3307	ECUMIH151JCN	1	DL3201	ELB4R031	1
IC2705	LM339NS	1	C3017	ECUMIH820JCN	1	C3154	ECEVOJV470S	1	C3308	ECUMIH121JCN	1	DL3301	VLD0265	1
IC2706	LM358PS-R	1	C3018	ECUMIE224ZFN	1	C3155	ECUMIH103KBN	1	C3309	ECUMIE104ZFN	1			
			C3019	ECEVOJV470S	1	C3156	ECEVOJV470S	1	C3310	ECUMIH103KBN	1	FL3001	VLF1049	1
J2701	ERJ6GEYOR00	1	C3020	ECUMIH103KBN	1	C3157	ECUMIH103KBN	1	C3311	ECEV1CV470S	1	FL3002	VLF1048	1
			C3021	ECUMIH223KBN	1	C3158	ECUMIE104ZFN	1	C3312	ECEVOJV470S	1	FL3003	VLF1015	1
L2701-04	VLQ0460	4	C3022	ECEVOJV470S	1	C3160	ECUMIH102JCN	1	C3313	ECEV1CV100S	1	FL3201	VLF1050	1
			C3023	ECUMIH103KBN	1	C3190, 91	ECUMIH103KBN	2	C3314	ECUMIH103KBN	1	FL3202	VLF1047	1
P2701	VJS3135	1	C3024	ECUMIE104KBN	1	C3192, 93	ECUMIH153KBN	2	C3315, 16	ECEVOJV470S	2	FL3203	VLF1055	1
P2702	VJS2149W	1	C3025	ECUMIH103KBN	1	C3194	ECUMIE104ZFN	1	C3317	ECEV1HV01S	1	FL3204	VLF1045	1
P2703	VJS3202B008	1	C3026	ECEV1CV470S	1	C3201	ECUMIE104ZFN	1	C3318	ECUMIE104ZFN	1	FL3205	VLF1051	1
P2704, 05	VJS1412	2	C3027	ECUMIE104KBN	1	C3203	ECQV1H104JZ	1	C3319	ECEV1EV47S	1	FL3302	ELB4H068	1
			C3028	ECUMIH103KBN	1	C3204	ECEVOJV470S	1	C3320	ECQV1H154JZ	1			
Q2701	MSD601-R	1	C3030-32	ECUMIH103KBN	3	C3205, 06	ECUMIH103KBN	2	C3321	ECUMIH471JCN	1	IC3001	AN3916	1
			C3033	ECEVOJV220S	1	C3207	ECQV1H823JZ	1	C3322	ECUMIH561JCN	1	IC3002	AN636NS	1
QR2701	MRN1404	1	C3034, 35	ECEVOJV470S	2	C3209, 10	ECEVOJV470S	2	C3323	ECQV1H474JZ	1	IC3003	MC74HC4053F	1
			C3036	ECUMIH101JCN	1	C3211	ECEV1HV3R3S	1	C3324	ECEVOJV470S	1	IC3004	NJM2233BMA	1
R2701	ERJ6GEYJ102	1	C3037	ECUMIE104KBN	1	C3212	ECUMIH331JCN	1	C3325	ECUMIH103KBN	1	IC3005	MN4528BS	1
R2702	ERJ6GEYJ101	1	C3038	ECUMIH222KBN	1	C3213	ECEVOJV470S	1	C3326	ECUMIH561JCN	1	IC3006	MC74HC86F	1
R2703	ERJ6GEYJ103	1	C3039	ECUMIH0800CN	1	C3214	ECUMIE104ZFN	1	C3327	ECEVOJV330S	1	IC3007	M52083FP	1
R2704	ERJ6GEYJ223	1	C3040	ECUMIH103KBN	1	C3215, 16	ECUMIH103KBN	2	C3328	ECU1C392G	1	IC3008	LM324NS	1
R2705	ERJ6GEYJ123	1	C3041	ECEV1HVR47S	1	C3217	ECUMIE104ZFN	1	C3329	ECUMIH152KBN	1	IC3009	MC14052BF	1
R2706	ERJ6GEYJ223	1	C3042, 43	ECUMIH103KBN	2	C3218	ECEV1HV01S	1	C3330	ECEV1HVR47SR	1	IC3010	NJM2233BMA	1
R2707, 08	ERJ6GEYJ103	2	C3044	ECEVOJV470S	1	C3219	ECEVOJV220S	1	C3331	ECUMIH331JCN	1	IC3011	NJM78L05UA	1
R2709	ERJ6GEYJ105	1	C3045-47	ECUMIH103KBN	3	C3220	ECEVOJV470S	1	C3332	ECEVOJV470S	1	IC3012	RC082BM	1
R2710	ERJ6GEYJ182	1	C3048	ECUMIH330JCN	1	C3221, 22	ECUMIH103KBN	2	C3333	ECUMIH103KBN	1	IC3013	MC14577BF	1
R2711	ERJ6GEYJ103	1	C3049	ECUMIH181JCN	1	C3223	ECEV1EV47S	1	C3334, 35	ECUMIE104ZFN	2	IC3014	TC74HC221AF	1
R2712	ERJ6GEYJ102	1	C3050	ECUMIH103KBN	1	C3224	ECUMIH103KBN	1	C3337	ECEVOJV470S	1	IC3015	AN3916	1
R2713, 14	ERDS2TJ330	2	C3051	ECUMIH560JCN	1	C3225	ECEV1HV47R	1	C3338	ECUMIH103KBN	1	IC3017	TC7S08F	1
R2715	ERX12SJ1R0	1	C3052	ECEV1HV3R3S	1	C3226-29	ECUMIH103KBN	4	C3339	ECUMIE104ZFN	1	IC3020	NJM78L05UA	1
R2716	ERDS2TJ330	1	C3053, 54	ECUMIH103KBN	2	C3230	ECEV1CV100S	1	C3340	ECUMIH271JCN	1	IC3151	MC14577BF	1
R2717	ERJ6GEYJ101	1	C3055	ECUMIH101JCN	1	C3231, 32	ECUMIH103KBN	2	C3341	ECEV1HV3R3S	1	IC3152	NJM2233BMA	1
R2718	ERJ6GEYJ272	1	C3056	ECUMIH180JCN	1	C3233	ECEV1CV100S	1	C3342	ECUMIE104ZFN	1	IC3153	SN74LS123NS	1
R2719	ERJ6GEYJ822	1	C3057	ECUMIH680JCN	1	C3234, 35	ECUMIE104ZFN	2	C3343	ECUMIH221JCN	1	IC3201	AN2352S	1
R2720	ERJ6GEYJ221	1	C3058	ECUMIH220JCN	1	C3236	ECUMIH103KBN	1	C3344	ECUMIH562KBN	1	IC3202	AN3396	1
R2721	ERJ6GEYJ102	1	C3059	ECEVOJV470S	1	C3237	ECEVOJV470S	1	C3345	ECEVOJV470S	1	IC3203	LM358PS	1
R2722, 23	ERJ6GEYJ222	2	C3060-62	ECUMIH103KBN	3	C3238	ECUMIH101JCN	1	C3346, 47	ECUMIH103KBN	2	IC3204	AN3940SC	1
R2724	ERJ6GEYJ224	1	C3063	ECUMIH680JCN	1	C3239	ECUMIH151JCN	1	C3348	ECQV1H683JZ	1	IC3205	NJM592M8	1
R2725, 26	ERJ6GEYJ102	2	C3064, 65	ECUMIH103KBN	2	C3240	ECEVOJV470S	1	C3349	ECUMIH220JCN	1	IC3206	TA7357P	1
R2727	ERJ6GEYJ681	1	C3069	ECUMIE104ZFN	1									



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
IC3207	SN74LS221NS	1	Q3007	2SA1022-B	1	QR3209	MRN2404	1	R3089	ERJ6GEYJ561	1	R3181	ERJ6GEYJ102	1
IC3208	TC7504F	1	Q3008	MSB709-R	1	QR3211	MRN1404	1	R3090	ERJ6GEYJ102	1	R3182	ERJ6GEYJ221	1
IC3309	NJM2233BMA	1	Q3009,10	XN4501	2	QR3301	MRN1404	1	R3092	ERJ6GEYJ102	1	R3183	ERJ6GEYJ561	1
IC3301	TC7504F	1	Q3011	MSB709-R	1				R3093	ERJ6GEYJ105	1	R3185	ERJ6GEYJ103	1
IC3302	MC14066BF	1	Q3012	MSD601-R	1	R3001	ERJ6GEYJ122	1	R3094	ERJ6GEYJ224	1	R3188	ERJ6GEYJ102	1
IC3303	LM324NS	1	Q3013	XN4401	1	R3002	ERJ6GEYJ103	1	R3095	ERJ6GEYJ272	1	R3189	ERJ6GEYJ821	1
IC3304	NJM2233BMA	1	Q3017	2SD1328-S	1	R3004	ERJ6GEYJ101	1	R3096	ERJ6GEYJ472	1	R3190,91	ERJ6GEYJ103	2
IC3305	AN3296S	1	Q3018	2SK198-R	1	R3005	ERJ6GEYJ332	1	R3097	ERJ6GEYJ393	1	R3192	ERJ6GEYJ102	1
IC3306	NJM2234MA	1	Q3019	MSD601-R	1	R3006	ERJ6GEYJ682	1	R3098	ERJ6GEYJ103	1	R3193	ERJ6GEYOR00	1
IC3307	MN4528BS	1	Q3020	2SB643	1	R3007	ERJ6GEYOR00	1	R3099	ERJ6GEYJ473	1	R3195	ERJ6GEYOR00	1
IC3308	AN6308S	1	Q3021	MSD601-R	1	R3008	ERJ6GEYJ472	1	R3100	ERJ6GEYJ563	1	R3197	ERJ6GEYOR00	1
IC3309	MC14577BF	1	Q3022	MSB709-R	1	R3009,10	ERJ6GEYJ103	2	R3103	ERJ6GEYJ222	1	R3198	ERJ6GEYJ332	1
IC3310	AN6308S	1	Q3024	MSD601-R	1	R3011	ERJ6GEYJ222	1	R3104	ERJ6GEYJ102	1	R3199	ERJ6GEYJ152	1
			Q3025-27	MSC2295-B	3	R3012	ERJ6GEYJ103	1	R3105	ERJ6GEYJ561	1	R3200,01	ERJ6GEYJ102	2
L3002-09	VLQ0319K101	8	Q3028	MSB709-R	1	R3013	ERJ6GEYJ102	1	R3106	ERJ6GEYJ102	1	R3202	ERJ6GEYJ223	1
L3010	VLQ0163J221	1	Q3029	MSD601-R	1	R3014	ERJ6GEYJ332	1	R3107	ERJ6GEYJ561	1	R3203	ERJ6GEYJ333	1
L3011	VLQ0163J390	1	Q3030	MSC2295-B	1	R3015	ERJ6GEYJ822	1	R3108	ERJ6GEYJ473	1	R3204	ERJ6GEYJ102	1
L3012	VLQ0133J391	1	Q3031	2SK374-R	1	R3016	ERJ6GEYJ102	1	R3109	ERJ6GEYJ102	1	R3205	ERJ6GEYJ151	1
L3013	VLQ0163J330	1	Q3032	MSB709-R	1	R3017	ERJ6GEYJ822	1	R3110	ERJ6GEYJ103	1	R3207	ERJ6GEYJ102	1
L3014	VLQ0319K101	1	Q3033-35	MSD601-R	3	R3018	ERJ6GEYJ333	1	R3111	ERJ6GEYJ221	1	R3208	ERJ6GEYJ272	1
L3015	VLQ0163J100	1	Q3036	MSB709-R	1	R3019	ERJ6GEYJ221	1	R3112,13	ERJ6GEYJ103	2	R3209	ERJ6GEYJ102	1
L3016	VLQ0163J220	1	Q3040	MSD601-R	1	R3020	ERJ6GEYJ102	1	R3114	ERJ6GEYJ472	1	R3211	ERJ6GEYJ222	1
L3017	VLQ0163J180	1	Q3101-03	XN4601	3	R3021	ERJ6GEYJ103	1	R3115	ERJ6GEYJ105	1	R3212	ERJ6GEYJ152	1
L3018	VLQ0163J220	1	Q3104,05	MSD601-R	2	R3022	ERJ6GEYJ471	1	R3116	ERJ6GEYJ681	1	R3213	ERJ6GEYJ223	1
L3020	VLQ0163J330	1	Q3106	MSB709-R	1	R3023	ERJ6GEYJ102	1	R3117	ERJ6GEYJ103	1	R3214	ERJ6GEYJ273	1
L3021,22	VLQ0319K101	2	Q3201	MSC2295-B	1	R3024	ERJ6GEYJ471	1	R3118	ERJ6GEYJ183	1	R3215	ERJ6GEYJ103	1
L3025	VLQ0163J330	1	Q3202	MSD601-R	1	R3025,26	ERJ6GEYJ152	2	R3119	ERJ6GEYJ153	1	R3216	ERJ6GEYJ104	1
L3027	VLQ0163J330	1	Q3203	MSC2295-B	1	R3027	ERJ6GEYJ471	1	R3120	ERJ6GEYJ182	1	R3217	ERJ6GEYJ222	1
L3028	VLQ0319K180	1	Q3204	MSD601-R	1	R3028	ERJ6GEYJ181	1	R3121	ERJ6GEYJ122	1	R3218	ERJ6GEYJ103	1
L3029	VLQ0319K220	1	Q3205	MSB709-R	1	R3029	ERJ6GEYJ332	1	R3122	ERJ6GEYJ182	1	R3219	ERJ6GEYJ223	1
L3030	VLQ0163J100	1	Q3206,07	MSD601-R	2	R3030	ERJ6GEYJ222	1	R3123	ERJ6GEYOR00	1	R3220	ERJ6GEYJ393	1
L3101	VLQ0319K101	1	Q3208	MSC2295-B	1	R3031	ERJ6GEYJ122	1	R3124	ERJ6GEYJ332	1	R3221	ERJ6GEYJ221	1
L3152	VLQ0319K101	1	Q3209,10	MSD601-R	2	R3032	ERJ6GEYJ102	1	R3125	ERJ6GEYJ750	1	R3222,23	ERJ6GEYJ103	2
L3201,02	VLQ0319K101	2	Q3211	MSC2295-B	1	R3033	ERJ6GEYJ474	1	R3126	ERJ6GEYJ470	1	R3224	ERJ6GEYJ102	1
L3203	VLQ0133J561	1	Q3212-14	MSD601-R	3	R3034	ERJ6GEYJ332	1	R3127	ERJ6GEYJ105	1	R3225	ERJ6GEYJ273	1
L3204	VLQ0163J151	1	Q3215	MSC2295-B	1	R3035	ERJ6GEYJ561	1	R3128	ERJ6GEYJ683	1	R3226	ERJ6GEYJ823	1
L3205,06	VLQ0319K101	2	Q3216	2SD1328-S	1	R3036	ERJ6GEYJ473	1	R3129	ERJ6GEYJ392	1	R3227,28	ERJ6GEYJ122	2
L3207	VLQ0133J102	1	Q3217	MSD601-R	1	R3037	ERJ6GEYJ332	1	R3131	ERJ6GEYJ103	1	R3229	ERJ6GEYJ102	1
L3208	VLQ0163J330	1	Q3218	MSC2295-B	1	R3038	ERJ6GEYJ102	1	R3132	ERJ6GEYJ105	1	R3230	ERJ6GEYJ821	1
L3209,10	VLQ0319K101	2	Q3219	MSD601-R	1	R3039	ERJ6GEYJ473	1	R3135	ERJ6GEYJ101	1	R3231	ERJ6GEYJ273	1
L3211	VLQ0163J221	1	Q3220	MSC2295-B	1	R3040	ERJ6GEYJ222	1	R3136,37	ERJ6GEYJ103	2	R3232	ERJ6GEYJ822	1
L3212	VLQ0163J101	1	Q3221-24	MSD601-R	4	R3041	ERJ6GEYJ102	1	R3138	ERJ6GEYJ152	1	R3233	ERJ6GEYJ102	1
L3213,14	VLQ0319K101	2	Q3225	MSC2295-B	1	R3042	ERJ6GEYJ152	1	R3139	ERJ6GEYJ183	1	R3234	ERJ6GEYJ471	1
L3215	VLQ0133J271	1	Q3226	MSD601-R	1	R3043,44	ERJ6GEYJ102	2	R3140	ERJ6GEYJ222	1	R3235	ERJ6GEYJ222	1
L3217	VLQ0163J390	1	Q3227	2SD1328-S	1	R3045	ERJ6GEYJ561	1	R3141	ERJ6GEYJ224	1	R3236	ERJ6GEYJ333	1
L3218	VLQ0319K101	1	Q3228	XN1213	1	R3053	ERJ6GEYJ223	1	R3142	ERJ6GEYJ272	1	R3237	ERJ6GEYJ103	1
L3219	VLQ0163J100	1	Q3229	MSD601-R	1	R3054	ERJ6GEYJ332	1	R3143	ERJ6GEYJ333	1	R3238	ERJ6GEYJ102	1
L3220	VLQ0133J821	1	Q3230	MSC2295-B	1	R3055	ERJ6GEYJ470	1	R3144,45	ERJ6GEYJ392	2	R3239	ERJ6GEYJ101	1
L3221	VLQ0133J331	1	Q3231-33	MSB709-R	3	R3056	ERJ6GEYJ102	1	R3146	ERJ6GEYJ473	1	R3240	ERJ6GEYJ223	1
L3222,23	VLQ0133J391	2	Q3234	MSD601-R	1	R3057	ERJ6GEYJ183	1	R3147	ERJ6GEYJ562	1	R3241	ERJ6GEYJ153	1
L3224	VLQ0163J330	1	Q3301	MSB709-R	1	R3059	ERJ6GEYJ822	1	R3148	ERJ6GEYJ682	1	R3242	ERJ6GEYJ223	1
L3301	VLQ0163J221	1	Q3302	MSD601-R	1	R3060	ERJ6GEYJ222	1	R3149	ERJ6GEYJ821	1	R3243	ERJ6GEYJ332	1
L3302-07	VLQ0319K101	6	Q3306	MSB709-R	1	R3061	ERJ6GEYJ223	1	R3150	ERJ6GEYJ223	1	R3244	ERJ6GEYJ102	1
L3309	VLQ0163J221	1	Q3307,08	MSD601-R	2	R3062,63	ERJ6GEYJ103	2	R3151	ERJ6GEYJ102	1	R3245	ERJ6GEYJ332	1
L3310,11	VLQ0319K101	2	Q3309	MSB709-R	1	R3064	ERJ6GEYJ332	1	R3152	ERJ6GEYJ103	1	R3246	ERJ6GEYJ820	1
L3312	VLQ0163J151	1	Q3310-14	MSD601-R	5	R3065	ERJ6GEYJ821	1	R3153	ERJ6GEYJ332	1	R3247	ERJ6GEYJ103	1
L3313	VLQ0163J4R7	1	Q3315	MSC2295-B	1	R3066	ERJ6GEYJ182	1	R3154,55	ERJ6GEYJ561	2	R3248,49	ERJ6GEYJ102	2
L3314	VLQ0163J151	1	Q3316-18	MSD601-R	3	R3067	ERJ6GEYJ103	1	R3156	ERJ6GEYJ103	1	R3250	ERJ6GEYJ222	1
L3315	VLQ0163J221	1	Q3319	MSB709-R	1	R3068	ERJ6GEYJ223	1	R3157,58	ERJ6GEYJ102	2	R3251	ERJ6GEYJ473	1
L3316	VLQ0163J390	1	Q3320	MSC2295-B	1	R3069	ERJ6GEYJ103	1	R3159	ERJ6GEYJ473	1	R3252	ERJ6GEYJ271	1
L3317	VLQ0163J330	1				R3070	ERJ6GEYOR00	1	R3160	ERJ6GEYJ151	1	R3253,54	ERJ6GEYJ222	2
L3318	VLQ0163J820	1	QR3002	MRN1404	1	R3071	ERJ6GEYJ101	1	R3161	ERJ6GEYJ102	1	R3255	ERJ6GEYJ471	1
L3319	VLQ0133J271	1	QR3003	MRN2404	1	R3072	ERJ6GEYJ561	1	R3162,63	ERJ6GEYOR00	2	R3256	ERJ6GEYJ561	1
L3320	VLQ0163J6R8	1	QR3005	MRN1404	1	R3073	ERJ6GEYJ271	1	R3164	ERJ6GEYJ151	1	R3257	ERJ6GEYJ101	1
L3325	VLQ0319K101	1	QR3006	MRN2404	1	R3076	ERJ6GEYJ332	1	R3165	ERJ6GEYJ102	1	R3258	ERJ6GEYJ333	1
L3327	VLQ0319K220	1	QR3007,08	MRN1404	2	R3077	ERJ6GEYJ561	1	R3166	ERJ6GEYJ273	1	R3259	ERJ6GEYJ223	1
L3328	VLQ0319K180	1	QR3009	DTC363EK	1	R3078	ERJ6GEYJ104	1	R3168	ERJ6GEYJ273	1	R3260	ERJ6GEYJ331	1
			QR3010	MRN1404	1	R3079	ERJ6GEYJ103	1	R3169	ERJ6GEYJ472	1	R3261	ERJ6GEYJ222	1
P931	VJP3176B100	1	QR3011-13	MRN2404	3	R3080	ERJ6GEYJ102	1	R3170	ERJ6GEYJ561	1	R3262	ERJ6GEYJ563	1
P3002	VJP3080	1	QR3014-16	MRN1404	3	R3081	ERJ6GEYJ333	1	R3171	ERJ6GEYJ103	1	R3263	ERJ6GEYJ471	1
			QR3017	MRN2404	1	R3082	ERJ6GEYJ820	1	R3172	ERJ6GEYJ681	1	R3264	ERJ6GEYJ102	1
Q3001	XN4601	1	QR3018	MSD601-R	1	R3085	ERJ6GEYJ102	1	R3173	ERJ6GEYJ222	1	R3265	ERJ6GEYJ222	1
Q3004	XN4501	1	QR3101	MRN1404	1	R3086	ERJ6GEYJ183	1	R3174-76	ERJ6GEYJ102	3	R3266,67	ERJ6GEYJ102	2
Q3005	MSC2295-B	1	QR3201	MRN2404	1	R3087	ERJ6GEYOR00	1	R3178	ERJ6GEYJ472	1	R3268	ERJ6GEYJ273	1
Q3006	MSD601-R	1	QR3204-06	MRN1404	3	R3088	ERJ6GEYJ271	1	R3180	ERJ6GEYJ103	1	R3269	ERJ6GEYJ102	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
R3270-72	ERJ6GEYJ681	3	R3353	ERJ6GEYJ153	1	R3559	ERJ6GEYJ333	1	C40010	ECEA1CSN100	1	C40091	ECUM1H223KBN	1
R3273	ERJ6GEYJ392	1	R3354	ERJ6GEYJ223	1	R3560, 61	ERJ6GEYJ102	2	C40011	ECEA1CKA100	1	C40092, 93	ECEA1CKA100	2
R3274	ERJ6GEYJ222	1	R3355-57	ERJ6GEYJ102	3	R3562	ERJ6GEYOR00	1	C40012	ECQB1H104JF	1	C40094	ECUM1H223KBN	1
R3275	ERJ6GEYOR00	1	R3358	ERJ6GEYJ222	1	R3563	ERJ6GEYJ102	1	C40013	ECUM1H560JCN	1	C40095	ECEA1CKA100	1
R3276	ERJ6GEYJ152	1	R3359	ERJ6GEYJ470	1	R3565	ERJ6GEYJ470	1	C40014	ECEA0JKA221	1	C40096	ECEA1CSN100	1
R3277	ERJ6GEYJ331	1	R3360	ERJ6GEYJ562	1	R3566	ERJ6GEYJ102	1	C40015	ECEA1CU221	1	C40097	ECEA1CKA100	1
R3278	ERJ6GEYJ222	1	R3361	ERJ6GEYJ332	1	R3567	ERJ6GEYJ470	1	C40016	ECQV1H334JZ	1	C40098	ECUM1H273KBN	1
R3279	ERJ6GEYJ102	1	R3362	ERJ6GEYJ223	1	R3568	ERJ6GEYJ105	1	C40017	ECQB1H104JF	1	C40099	ECEA1HKN010	1
R3281	ERJ6GEYJ222	1	R3363	ERJ6GEYJ103	1	R3571	ERJ6GEYJ272	1	C40018	ECEA1CKA100	1	C40101	ECEA16M10	1
R3282	ERJ6GEYJ124	1	R3364	ERJ6GEYJ272	1				C40019	ECEA1CKA101	1	C40102	ECEA1HKA010	1
R3283	ERJ6GEYJ123	1	R3366	ERJ6GEYJ222	1	VR3001	EVN32CA00B24	1	C40020	ECQB1H473JF	1	C40103	ECEA0JKA221	1
R3284	ERJ6GEYJ474	1	R3367	ERJ6GEYJ280	1	VR3003	EVN32CA00B53	1	C40021	ECKD2H151KB	1	C40104	ECQV1H334JZ	1
R3285, 86	ERJ6GEYJ102	2	R3368	ERJ6GEYJ102	1	VR3006	EVN32CA00B24	1	C40022	ECKD2H151KB	1	C40105	ECQB1H104JF	1
R3287	ERJ6GEYJ222	1	R3369	ERJ6GEYJ151	1	VR3007-11	EVN70SX04B54	5	C40023	ECUM1H102KBN	1	C40106	ECEA1CKA100	1
R3288	ERJ6GEYJ103	1	R3370	ERJ6GEYJ391	1	VR3014, 15	EVN70SX04B24	2	C40024	ECQV1H223JZ3	1	C40107	ECQB1H473JF	1
R3289	ERJ6GEYJ471	1	R3371, 72	ERJ6GEYJ222	2	VR3101	EVN70SX04B14	1	C40025	ECUM1H02KBN	1	C40108	ECEA1CKA101	1
R3290	ERJ6GEYJ223	1	R3373	ERJ6GEYJ820	1	VR3201	EVN32CA00B14	1	C40026	ECQB1H103JF	1	C40109	ECEA1CU221	1
R3291	ERJ6GEYJ333	1	R3374	ERJ6GEYJ102	1	VR3202	EVN7J5X30B32	1	C40027	ECQM2152KZ	1	C40110	ECEA1CKA100	1
R3292	ERJ6GEYJ471	1	R3375	ERJ6GEYJ681	1	VR3203	EVN32CA00B14	1	C40028	ECEA1CKA101	1	C40111	ECQB1H273JF	1
R3293	VRE0034E682	1	R3376	ERJ6GEYOR00	1	VR3204, 05	EVN7J5X30B13	2	C40029	ECFS1EE336	1	C40112	ECUM1H102KBN	1
R3294	ERJ6GEYJ102	1	R3377	ERJ6GEYJ222	1	VR3301	EVN32CA00B14	1	C40030	ECUM1H152KBN	1	C40113	ECQB1H472JF	1
R3295	ERJ6GEYJ103	1	R3378, 79	ERJ6GEYJ331	2	VR3305	EVN32CA00B23	1	C40031, 32	ECEA10M22	2	C40114	ECQB1H562JF	1
R3296	ERJ6GEYJ333	1	R3380	ERJ6GEYJ471	1				C40033	ECEA16M10	1	C40115	ECEA1HKA010	1
R3297	ERJ6GEYJ181	1	R3384	ERJ6GEYOR00	1	X3001	V5X0160	1	C40034	ECEA50M1	1	C40116	ECQB1H472JF	1
R3298	ERJ6GEYOR00	1	R3385	ERJ6GEYJ221	1				C40035	ECUM1H102KBN	1	C40117	ECEA1CKA100	1
R3299	ERJ6GEYJ103	1	R3386	ERJ6GEYOR00	1				C40036	ECEA10M33	1	C40118	ECUM1H102JCN	1
R3300	ERJ6GEYJ221	1	R3389	ERJ6GEYJ223	1				C40037	ECQB1H823JF	1	C40119	ECQB1H562JF	1
R3301	ERJ6GEYJ103	1	R3390	ERJ6GEYJ471	1				C40038	ECUM1H101JCN	1	C40120	ECUM1C104KBN	1
R3302	ERJ6GEYJ102	1	R3391	ERJ6GEYJ152	1				C40039	ECEA1EKAAR7	1	C40121	ECKD2H331KB	1
R3303	ERJ6GEYJ222	1	R3392	ERJ6GEYJ102	1		[VEP04419A]		C40040	ECEA1HKA2R2	1	C40122	ECKD2H151KB	1
R3304	ERJ6GEYJ105	1	R3393	ERJ6GEYJ472	1		MIC JACK		C40041, 42	ECUM1H223KBN	2	C40123	ECQM2152KZ	1
R3305	ERJ6GEYJ101	1	R3394	ERJ6GEYJ222	1				C40043	ECEA1CKA100	1	C40124	ECEA1HKA010	1
R3306	ERJ6GEYJ221	1	R3397, 98	ERJ6GEYJ681	2	C4301	ECEA1CKA100	1	C40044	ECQB1H472JF	1	C40125	ECUM1H102KBN	1
R3307	ERJ6GEYJ102	1	R3399, 00	ERJ6GEYJ102	2	C4302	ECUM1H102KBN	1	C40045	ECQB1H273JF	1	C40126	ECUM1H152KBN	1
R3308	ERJ6GEYJ103	1	R3401	ERJ6GEYJ152	1	C4303-05	ECEA1CKA470	3	C40046	ECEA1CKA100	1	C40127, 28	ECEA1HKN010	2
R3309	ERJ6GEYJ473	1	R3402	ERJ6GEYJ222	1	C4306	ECEA1CKA100	1	C40047	ECUM1H102KBN	1	C40129	ECUM1C104KBN	1
R3310	ERJ6GEYJ105	1	R3403	ERJ6GEYJ102	1	C4307	ECUM1H102KBN	1	C40048	ECQB1H562JF	1	C40131	ECUM1H392KBN	1
R3311	ERJ6GEYJ103	1	R3404	ERJ6GEYJ103	1	C4308	ECEA1CKA470	1	C40049	ECEA1HKA010	1	C40132	ECQB1H123JF	1
R3312	ERJ6GEYJ473	1	R3405	ERJ6GEYJ821	1				C40050	ECQB1H472JF	1	C40133, 34	ECUM1H102KBN	2
R3313	ERJ6GEYJ102	1	R3406	ERJ6GEYJ151	1	FL4301, 02	VLF0523	2	C40051	ECQM2152KZ	1	C40135	ECQB1H473JF	1
R3314	ERJ6GEYJ272	1	R3407	ERJ6GEYJ102	1				C40052	ECEA1CKA100	1	C40136	ECEA1EKN47	1
R3315, 16	ERJ6GEYJ103	2	R3408	ERJ6GEYJ101	1	IC4301	NJM2068MD	1	C40053	ECUM1H102JCN	1	C40137	ECEA1CKA100	1
R3317	ERJ6GEYJ182	1	R3409, 10	ERJ6GEYJ102	2				C40054	ECUM1H152KBN	1	C40138	ECQB1H333JF	1
R3318	ERJ6GEYJ473	1	R3411	ERJ6GEYJ152	1	J4301, 02	VJJO078	2	C40055	ECUM1H102KBN	1	C40139	ECEA1CU471	1
R3319	ERJ6GEYJ221	1	R3502	ERJ6GEYJ561	1				C40056	ECEA1HKA010	1	C40140, 41	ECEA1CKA101	2
R3320	ERJ6GEYJ102	1	R3503	ERJ6GEYJ332	1	P4301	VJP1234T	1	C40057, 58	ECEA1HKN010	2	C40142	ECEA1CKA220	1
R3321	ERJ6GEYJ471	1	R3504-10	ERJ6GEYJ152	7				C40059	ECUM1C104KBN	1	C40143	ECEA1CKA101	1
R3322	ERJ6GEYJ561	1	R3511	ERJ6GEYJ182	1	Q4301	MSD602-R	1	C40060, 61	ECUM1H102KBN	2	C40144	ECUM1H103KBN	1
R3323	ERJ6GEYJ471	1	R3512	ERJ6GEYJ561	1				C40062	ECQB1H473JF	1	C40145	ECEA1AKA330	1
R3324	ERJ6GEYJ102	1	R3513	ERJ6GEYJ392	1	R4301, 02	ERJ6GEYJ224	2	C40063	ECEA1CKA100	1	C40146	ECQB1H104JF	1
R3325	ERJ6GEYJ332	1	R3514	ERJ6GEYJ152	1	R4303	ERJ6GEYJ561	1	C40064	ECEA1EKN47	1	C40147	ECEA1AKA330	1
R3327	ERJ6GEYJ472	1	R3515, 16	ERJ6GEYJ472	2	R4304	ERJ6GEYJ124	1	C40065	ECQB1H562JF	1	C40148	ECUM1H330JCN	1
R3328	ERJ6GEYJ103	1	R3517	ERJ6GEYJ561	1	R4305	ERJ6GEYJ753	1	C40066	ECUM1C104KBN	1	C40149	ECEA1HKA010	1
R3329	ERJ6GEYJ332	1	R3518, 19	ERJ6GEYJ393	2	R4306	ERJ6GEYJ182	1	C40068	ECUM1H392KBN	1	C40150	ECUM1H102KBN	1
R3330	ERJ6GEYJ183	1	R3520	ERJ6GEYJ562	1	R4307, 08	ERJ6GEYJ224	2	C40069	ECQB1H123JF	1	C40151	ECEA1CKA330	1
R3331	ERJ6GEYJ153	1	R3522, 23	ERJ6GEYJ152	2	R4309	ERJ6GEYJ124	1	C40070	ECUM1H273KBN	1	C40152	ECEA1CKA101	1
R3332	ERJ6GEYJ474	1	R3524	ERJ6GEYJ820	1	R4310	ERJ6GEYJ753	1	C40071	ECEA1HKA010	1	C40153	ECUM1H102KBN	1
R3333	ERJ6GEYJ102	1	R3525	ERJ6GEYJ560	1	R4311, 12	ERJ6GEYJ330	2	C40072	ECQB1H333JF	1	C40154	ECEA1CKA101	1
R3334	ERJ6GEYJ683	1	R3526	ERJ6GEYJ222	1	R4314, 15	ERJ6GEYOR00	2	C40073	ECEA1CU471	1	C40155	ECEA1CKA100	1
R3335	ERJ6GEYJ331	1	R3527	ERJ6GEYJ153	1	R4316	ERJ6GEYJ561	1	C40074	ECEA1CKA101	1	C40156-58	ECUM1H103KBN	3
R3336	ERJ6GEYJ101	1	R3528	ERJ6GEYJ393	1				C40075	ECUM1H153KBN	1	C40159, 60	ECEA1CKA100	2
R3337	ERJ6GEYJ684	1	R3529	ERJ6GEYJ332	1				C40076	ECEA1HKA010	1	C40161	ECEA1AKA101	1
R3338	ERJ6GEYJ753	1	R3530	ERJ6GEYJ102	1				C40077	ECUM1H152KBN	1	C40162, 63	ECEA1CKA100	2
R3339	ERJ6GEYJ103	1	R3532, 33	ERJ6GEYJ272	2				C40078	ECFS1EE336	1	C40164	ECEA1CSN100	1
R3340	ERJ6GEYJ104	1	R3535	ERJ6GEYJ272	1				C40079, 80	ECEA10M22	2	C40165, 66	ECUM1H103KBN	2
R3341	ERJ6GEYJ153	1	R3536	ERJ6GEYJ393	1				C40081	ECEA16M10	1	C40167	ECEA1CKA100	1
R3342	ERJ6GEYJ682	1	R3537	ERJ6GEYJ104	1		[VEP04420A]		C40082	ECEA50M1	1	C40168	ECEA1CSN100	1
R3343	VRE0034E473	1	R3538	ERJ6GEYJ101	1		AUDIO (1)		C40083	ECUM1H102KBN	1	C40169	ECEA1CKA330	1
R3344	ERJ6GEYJ102	1	R3542	ERJ6GEYJ391	1	C40001	ECEA1CU471	1	C40084	ECEA10M33	1	C40170	ECEA1HKA010	1
R3345	ERJ6GEYJ332	1	R3543	ERJ6GEYJ681	1	C40002	ECUM1H153KBN	1	C40085	ECQB1H823JF	1	C40171	ECEA1CKA470	1
R3346	ERJ6GEYJ152	1	R3544	ERJ6GEYJ101	1	C40003	ECEA1CKA101	1	C40086	ECEA1EKAAR7	1	C40172	ECEA1CKA330	1
R3347	ERJ6GEYJ102	1	R3545	ERJ6GEYJ273	1	C40004	ECEA16M10	1	C40087	ECUM1H101JCN	1	C40173	ECEA1CKA470	1
R3349	ERJ6GEYJ221	1	R3547-49	ERJ6GEYOR00	3	C40006	ECEA1HKN010	1	C40088	ECEA1HKA2R2	1	C40175	ECEA1CKA101	1
R3350	ERJ6GEYJ152	1	R3552	ERJ6GEYJ472	1	C40007	ECEA1HKA010	1	C40089	ECQB1H104JF	1	C40176	ECEA1CKA470	1
R3352	ERJ6GEYOR00	1	R3558	ERJ6GEYJ473	1	C40008, 09	ECEA1CKA100	2	C40090	ECUM1H560JCN	1	C40180-83	ECEA1CKA100	4



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
D40001-11	MA151K	11	Q40045	MSB709-R	1	R40055	ERJ6GEYJ332	1	R40136	ERJ6GEYJ104	1	R40235,36	ERJ6GEYJ102	2
D40012,13	MA151WA	2	Q40046	2SB710A-R	1	R40056	ERJ6GEYJ181	1	R40137	ERJ6GEYJ102	1	R40237	ERJ6GEYJ103	1
D40014	MA153	1	Q40047	2SD602-R	1	R40057	ERJ6GEYJ102	1	R40138	ERJ6GEYJ824	1	R40240,41	ERJ6GEYJ104	2
D40015	MA151K	1	Q40048	MSD601-R	1	R40058	ERJ6GEYJ472	1	R40139	ERJ6GEYJ472	1	R40242-46	ERJ6GEYJ223	5
D40016	MA151WK	1	Q40049	2SD1862	1	R40059	ERJ6GEYJ333	1	R40140	ERJ6GEYJ182	1			
D40017	MA151K	1				R40060	ERJ6GEYJ103	1	R40141	ERJ6GEYJ102	1	RY40001	VSY2067	1
D40018	MA723	1	QR40001-3	MRN1403	3	R40061	ERJ6GEYJ223	1	R40142	ERJ6GEYJ184	1			
			QR40004	UN2114	1	R40062	ERJ6GEYJ564	1	R40143	ERJ6GEYJ102	1	TL40001	VLTO146	1
			QR40005	MRN1403	1	R40063	ERDS2TJ330	1	R40144	ERJ6GEYJ274	1	TL40002	VLTO143	1
FL40001,2	VLF0402	2	QR40006	MRN1404	1	R40064	ERJ6GEYJ681	1	R40145	ERJ6GEYJ104	1	TL40003,4	VLTO145	2
			QR40007	MRN1403	1	R40065	ERJ6GEYJ472	1	R40146	ERJ6GEYJ473	1	TL40005	VLTO146	1
IC40001	HA12005	1	QR40008-0	MRN2403	3	R40066	ERJ6GEYJ682	1	R40147	ERJ6GEYJ332	1			
IC40002	NE646N	1	QR40011	MRN1403	1	R40067	ERJ6GEYJ102	1	R40148	ERJ6GEYJ181	1	VR40002,3	EVN32CA00B23	2
IC40003	HA12005	1	QR40012	MRN1402	1	R40068	ERJ6GEYJ183	1	R40149	ERJ6GEYJ102	1	VR40004	EVN32CA00B15	1
IC40004	NE646N	1	QR40013	UN2217	1	R40069	ERJ6GEYJ104	1	R40150	ERJ6GEYJ333	1	VR40005	EVN32CA00B53	1
IC40005	UPC4558G2	1	QR40014	UN2215	1	R40070	ERJ6GEYJ823	1	R40151	ERJ6GEYJ472	1	VR40007,8	EVN32CA00B23	2
IC40006,7	MN1280R	2	QR40015-7	MRN1403	3	R40071	ERJ6GEYJ273	1	R40152	ERJ6GEYJ103	1	VR40009	EVN32CA00B15	1
IC40008	AN360	1	QR40018	UN2114	1	R40072	ERJ6GEYJ221	1	R40153	ERJ6GEYJ223	1	VR40010	EVN32CA00B53	1
IC40009	MC14053BF	1	QR40019	MRN1403	1	R40073	ERJ6GEYJ222	1	R40154	ERJ6GEYJ564	1	VR40011,2	EVN32CA00B23	2
IC40010-2	MC74HC595F	3	QR40020-2	MRN2403	3	R40074	ERJ6GEYJ223	1	R40155	ERJ6GEYJ221	1			
IC40013-5	TD62503F	3	QR40023	MRN1403	1	R40075	ERJ6GEYJ682	1	R40156	ERJ6GEYJ183	1			
IC40016	MC14066BF	1	QR40024	MRN1402	1	R40076	ERDS1VJ100	1	R40157	ERJ6GEYJ222	1			
IC40017	MC14053BF	1	QR40025	MRN1403	1	R40077	ERJ6GEYJ562	1	R40158	ERJ6GEYJ104	1			
IC40018,9	AN6558S	2	QR40026	UN2215	1	R40078	ERJ6GEYJ102	1	R40159	ERJ6GEYJ273	1			
IC40020	MS1132L	1	QR40027	UN2217	1	R40079-81	ERJ6GEYJ472	3	R40160	ERJ6GEYJ823	1			
IC40021	TC7532F	1	QR40028	MRN1404	1	R40082	ERJ6GEYJ155	1	R40161-63	ERJ6GEYJ103	3			
			QR40029-2	MRN2404	4	R40083	ERJ6GEYJ392	1	R40164	ERJ6GEYJ155	1			
L40001	VLQEL06F102K	1				R40084	ERJ6GEYJ821	1	R40165	ERJ6GEYJ821	1	C41001	ECEA1CU471	1
L40002	VLQ0123	1	R40001-03	ERJ6GEYJ472	3	R40085	ERJ6GEYJ155	1	R40166	ERJ6GEYJ392	1	C41002	ECUM1H103ZFN	1
L40003	VLQEL06F102K	1	R40004	ERJ6GEYJ272	1	R40086,87	ERJ6GEYJ103	2	R40167	ERJ6GEYJ155	1	C41003,04	ECEA1HPH3R3	2
L40004,05	VLQEL06F471K	2	R40005	ERJ6GEYJ472	1	R40088	ERDS2TJ220	1	R40168	ERDS2TJ330	1	C41005	ECQB1H682JF	1
L40006	VLQEL06F102K	1	R40006	ERJ6GEYJ103	1	R40089	ERJ6GEYJ333	1	R40169	ERJ6GEYJ681	1	C41006	ECUM1H102JCN	1
L40007	VLQ0123	1	R40007	ERJ6GEYJ472	1	R40090	ERJ6GEYJ123	1	R40170	ERJ6GEYJ472	1	C41007	ECQB1H223JF	1
L40008,09	VLQEL06F102K	2	R40008	ERJ6GEYJ223	1	R40091,92	ERJ6GEYJ562	2	R40171	ERJ6GEYJ102	1	C41008	ECEA1EKA100	1
L40010	VLQ0460	1	R40009	ERJ6GEYJ123	1	R40093,94	ERJ6GEYJ472	2	R40172	ERJ6GEYJ682	1	C41009	ECEA1EPH4R7	1
			R40010	ERJ6GEYJ154	1	R40095	ERJ6GEYJ103	1	R40173	ERJ6GEYJ223	1	C41010	ECQB1H223JF	1
P40001	VJP1231T	1	R40011,12	ERJ6GEYJ682	2	R40096	ERJ6GEYJ472	1	R40174	ERJ6GEYJ682	1	C41011	ECEA1CKA470	1
P40002	VJP1230R	1	R40013	ERJ6GEYJ273	1	R40097	ERJ6GEYJ272	1	R40175	ERDS1VJ100	1	C41012	ECQB1H103JF	1
P40003	VJP1230T	1	R40014	ERJ6GEYJ822	1	R40098	ERJ6GEYJ472	1	R40176	ERJ6GEYJ562	1	C41013	ECQB1H332JF	1
P40004	VJP3176B054	1	R40015	ERJ6GEYJ104	1	R40099	ERJ6GEYJ123	1	R40177	ERJ6GEYJ102	1	C41014-16	ECUM1H102JCN	3
			R40016	ERJ6GEYJ333	1	R40100	ERJ6GEYJ223	1	R40178-80	ERJ6GEYJ472	3	C41017	ECEA1EPH4R7	1
Q40001	2SD1306	1	R40017	ERJ6GEYJ104	1	R40101	ERJ6GEYJ472	1	R40181	ERJ6GEYJ563	1	C41018	ECUM1H104ZFN	1
Q40002,03	2SD1149-R	2	R40018	ERJ6GEYJ102	1	R40102	ERJ6GEYJ154	1	R40182	ERJ6GEYJ104	1	C41019	ECUM1H103ZFN	1
Q40004	2SB709A	1	R40019	ERJ6GEYJ824	1	R40103	ERJ6GEYJ123	1	R40183	ERJ6GEYJ154	1	C41020	ECEA1APZ101	1
Q40005,06	MSD601-R	2	R40020,21	ERJ6GEYJ472	2	R40104	VRE0034E564	1	R40184	ERJ6GEYJ152	1	C41021,22	ECUM1H103ZFN	2
Q40007	MSB709-R	1	R40022	ERJ6GEYJ822	1	R40105	ERJ6GEYJ123	1	R40185	ERJ6GEYJ151	1	C41023	ECEA1APH101	1
Q40008	2SD636	1	R40023	ERJ6GEYJ562	1	R40106	VRE0034E104	1	R40186	ERJ6GEYJ471	1	C41024	ECEA0JKA470	1
Q40009	2SD1862	1	R40024	ERJ6GEYJ182	1	R40107	ERJ6GEYJ473	1	R40187,88	ERJ6GEYJ103	2	C41025	ECQB1H104JF	1
Q40010	2SB643	1	R40025	ERJ6GEYJ184	1	R40108	ERJ6GEYJ222	1	R40189	ERJ6GEYJ104	1	C41026	ECUM1H103ZFN	1
Q40011	2SD1149-R	1	R40026,27	ERJ6GEYJ102	2	R40109	ERJ6GEYJ221	1	R40190	ERJ6GEYJ103	1	C41027	ECUM1H102JCN	1
Q40012	MSB709-R	1	R40028	ERJ6GEYJ274	1	R40110	ERJ6GEYJ222	1	R40191	ERJ6GEYJ222	1	C41028	ECUM1H331JCN	1
Q40013	2SD1149-R	1	R40029	ERJ6GEYJ104	1	R40111	ERJ6GEYJ221	1	R40192-99	ERJ6GEYJ103	8	C41029	ECQB1H104JF	1
Q40014,15	2SD602A	2	R40030	ERJ6GEYJ123	1	R40112	ERJ6GEYJ473	1	R40200	ERJ6GEYJ102	1	C41030	ECEA0JKS330	1
Q40016,17	2SB710A-R	2	R40031	VRE0034E564	1	R40113	ERJ6GEYJ561	1	R40201	ERJ6GEYJ223	1	C41031	ECQV1H274JZ	1
Q40018	2SD1862	1	R40032	ERJ6GEYJ123	1	R40114	ERJ6GEYJ393	1	R40202	ERJ6GEYJ563	1	C41032,33	ECUM1H103ZFN	2
Q40019	MSB709-R	1	R40033	VRE0034E104	1	R40115	ERJ6GEYJ102	1	R40203	ERJ6GEYJ472	1	C41034	ECEA1APZ101	1
Q40020,21	2SD602A	2	R40034	ERJ6GEYJ473	1	R40116	ERJ6GEYJ104	1	R40204	ERJ6GEYJ560	1	C41035-37	ECUM1H103ZFN	3
Q40022,23	2SC2405-S	2	R40035	ERJ6GEYJ222	1	R40117	ERJ6GEYJ223	1	R40205	ERJ6GEYJ222	1	C41038	ECUM1H101JCN	1
Q40024,25	2SD1306	2	R40036	ERJ6GEYJ221	1	R40118	ERJ6GEYJ473	1	R40206	ERJ6GEYJ561	1	C41039	ECUM1H103ZFN	1
Q40026	2SD1149-R	1	R40037	ERJ6GEYJ222	1	R40119	ERJ6GEYJ104	1	R40207,08	ERJ6GEYJ102	2	C41040	ECUM1H104ZFN	1
Q40027	2SB709A	1	R40038	ERJ6GEYJ221	1	R40120	ERJ6GEYJ562	1	R40209,10	ERJ6GEYJ104	2	C41041	ECEA1EPH4R7	1
Q40028	2SD1149-R	1	R40039	ERJ6GEYJ473	1	R40121	ERJ6GEYJ103	1	R40211	ERJ6GEYJ103	1	C41042-44	ECUM1H102JCN	3
Q40029,30	MSD601-R	2	R40040	ERJ6GEYJ561	1	R40122	ERJ6GEYJ222	1	R40212-15	ERJ6GEYJ102	4	C41045	ECQB1H332JF	1
Q40031	MSB709-R	1	R40041	ERJ6GEYJ393	1	R40123	ERJ6GEYJ472	1	R40216,17	ERJ6GEYJ104	2	C41046	ECQB1H103JF	1
Q40032	2SD636	1	R40042	ERJ6GEYJ102	1	R40124	ERJ6GEYJ103	1	R40218	ERJ6GEYJ102	1	C41047	ECEA1CKA470	1
Q40033	2SD1149-R	1	R40043,44	ERJ6GEYJ104	2	R40125	ERJ6GEYJ105	1	R40219,20	ERJ6GEYJ103	2	C41048,49	ECQB1H223JF	2
Q40034	MSB709-R	1	R40045	ERJ6GEYJ222	1	R40127	ERJ6GEYJ472	1	R40221	ERJ6GEYJ102	1	C41050	ECEA1EKA100	1
Q40035	2SB643	1	R40046	ERJ6GEYJ472	1	R40128	ERJ6GEYJ562	1	R40222	ERJ6GEYJ104	1	C41051	ECUM1H102JCN	1
Q40036	2SD1862	1	R40047	ERJ6GEYJ473	1	R40129	ERJ6GEYJ822	1	R40223	ERJ6GEYJ102	1	C41052	ECQB1H682JF	1
Q40037	MSB709-R	1	R40048	ERJ6GEYJ223	1	R40130	ERJ6GEYJ682	1	R40224-28	ERJ6GEYJ103	5	C41053,54	ECEA1EKN4R7	2
Q40038,39	2SD602A	2	R40049	ERJ6GEYJ562	1	R40131	ERJ6GEYJ273	1	R40229	ERJ6GEYJ151	1	C41055,56	ECEA1CKA100	2
Q40040	2SB710A-R	1	R40050,51	ERJ6GEYJ103	2	R40132	ERJ6GEYJ682	1	R40230	ERJ6GEYJ102	1	C41057	ECEA1CKA470	1
Q40041,42	2SC2405-S	2	R40052	ERJ6GEYJ105	1	R40133	ERJ6GEYJ333	1	R40231,32	ERJ6GEYJ104	2	C41058	ECEA1CP2220	1
Q40043	2SD1306	1	R40053	ERJ6GEYJ103	1	R40134	ERJ6GEYJ104	1	R40233	ERJ6GEYJ103	1	C41059	ECEA1CKA470	1
Q40044	2SD1149-R	1	R40054	ERJ6GEYJ473	1	R40135	ERJ6GEYJ822	1	R40234	ERJ6GEYJ104	1	C41060	ECEA1KA101	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
C41061	ECUM1H103ZF	1				R41022	ERJ6GEYJ102	1	R41119	ERJ6GEYJ103	1	R41206	ERJ6GEYJ183	1
C41062	ECEA1AP2101	1				R41023	VRE0034E223	1	R41120	ERJ6GEYOR00	1	R41207	ERJ6GEYJ152	1
C41063,64	ECEA1HPZ010	2	L41001-03	VLQ0460	3	R41024	VRE0034E622	1	R41121	ERJ6GEYJ103	1	R41208	ERJ6GEYJ103	1
C41065,66	ECEA1CKA470	2	L41004-08	VLQEL06F102K	5	R41025	ERJ6GEYJ163	1	R41122	ERJ6GEYJ391	1	R41209	ERJ6GEYJ472	1
C41067,68	ECEA1CSN100	2	L41009,10	VLQEL05K101J	2	R41026	ERJ6GEYJ105	1	R41123	ERJ6GEYJ472	1	R41210-12	ERJ6GEYJ103	3
C41069,70	ECEA1EKA4R7	2	L41011	VLQEL05K150J	1	R41027	ERJ6GEYJ102	1	R41124	ERJ6GEYJ3683	1	R41213	ERJ6GEYJ182	1
C41071	ECUM1H103ZF	1	L41012	VLQEL05K101J	1	R41028,29	ERJ6GEYJ473	2	R41125	ERJ6GEYJ472	1	R41214	ERJ6GEYJ822	1
C41072-74	ECEA1CKA470	3				R41030	ERJ6GEYJ102	1	R41126	ERJ6GEYJ3683	1	R41215	ERJ6GEYJ183	1
C41075	ECEA1AKS221	1	P41001	VJP3078	1	R41031	ERJ6GEYJ563	1	R41127,28	ERJ6GEYJ470	2	R41216,17	ERJ6GEYJ103	2
C41076	ECEA1AKA330	1	P41002	VJP3529	1	R41032	ERJ6GEYJ182	1	R41129	ERJ6GEYJ561	1	R41218	ERJ6GEYJ472	1
C41077	ECEA0JKA101	1	P41003	VJP3176B064	1	R41033,34	ERJ6GEYJ152	2	R41130	ERJ6GEYJ102	1	R41219	ERJ6GEYJ103	1
C41078	ECUM1H100DCN	1				R41035	ERJ6GEYJ182	1	R41131	ERJ6GEYJ103	1	R41220	ERJ6GEYJ152	1
C41079	ECEA1CKA100	1	Q41002,03	2SD1306	2	R41036,37	ERJ6GEYJ562	2	R41132,33	ERJ6GEYJ470	2	R41221	ERJ6GEYJ222	1
C41080	ECEA1AKA470	1	Q41004	2SD636-R	1	R41038	ERJ6GEYJ181	1	R41134	ERJ6GEYJ561	1	R41222	ERJ6GEYJ152	1
C41081	ECUM1H102KBN	1	Q41005	XN1501	1	R41039	ERJ6GEYJ6103	1	R41135	ERJ6GEYJ102	1	R41223	ERJ6GEYJ222	1
C41082	ECEA1CU221	1	Q41006,07	MSD601-R	2	R41040	ERJ6GEYJ303	1	R41136	ERJ6GEYJ103	1	R41224	ERJ6GEYJ152	1
C41083	ECEA1CSN100	1	Q41008	2SD1306	1	R41041	ERJ6GEYJ6104	1	R41137	ERJ6GEYK1R0	1	R41226	ERJ6GEYJ682	1
C41084	ECEA1CKA470	1	Q41009	2SD638	1	R41042	ERJ6GEYJ562	1	R41138	ERJ6GEYJ223	1	R41227-29	ERJ6GEYJ103	3
C41085	ECQB1H222JF	1	Q41010	2SB643	1	R41043	ERJ6GEYJ6183	1	R41139	ERJ6GEYJ333	1	R41230	ERJ6GEYJ681	1
C41086,87	ECEA1CKA100	2	Q41011	2SD1306	1	R41044	VRE0034E103	1	R41140	ERJ6GEYJ103	1	R41231	ERJ6GEYJ273	1
C41088	ECEA1CKA470	1	Q41012-14	MSD601-R	3	R41045	VRE0034E112	1	R41141	ERJ6GEYJ272	1	R41232	ERJ6GEYJ104	1
C41089	ECEA1CKA100	1	Q41015	2SD1328-R	1	R41046	ERJ6GEYJ681	1	R41142	ERJ6GEYJ123	1	R41233,34	ERJ6GEYJ103	2
C41090	ECEA1CKA470	1	Q41016	2SD602A	1	R41047,48	ERJ6GEYJ682	2	R41143	ERJ6GEYJ223	1	R41235	ERJ6GEYJ563	1
C41091	ECUM1H101JCN	1	Q41017,18	2SD1306	2	R41049	ERJ6GEYJ104	1	R41144	ERJ6GEYJ153	1	R41236,37	ERJ6GEYJ103	2
C41092	ECEA1AKA470	1	Q41019,20	MSC2295-B	2	R41050	ERJ6GEYJ182	1	R41145	ERJ6GEYJ102	1			
C41093	ECEA1CKA100	1	Q41021	MSD601-R	1	R41051	ERJ6GEYJ821	1	R41146	ERJ6GEYJ392	1	SW41001	ESD145131	1
C41094-96	ECEA1CKA470	3	Q41022-24	2SD602A-R	3	R41052	ERJ6GEYJ330	1	R41147	ERJ6GEYJ391	1			
C41097,98	ECUM1H103ZF	2	Q41025	2SB644	1	R41053	ERJ6GEYJ102	1	R41148	ERJ6GEYJ562	1	VR41001	EVN32CA00B24	1
C41099	ECUM1H102JCN	1	Q41026	2SD639	1	R41054,55	ERJ6GEYJ223	2	R41149	ERJ6GEYJ103	1	VR41002	EVMF65A00B14	1
C41100	ECUM1H120JCN	1	Q41027	MSC2295-B	1	R41056	ERJ6GEYJ682	1	R41150	ERJ6GEYJ222	1	VR41003	EVN32CA00B23	1
C41101	ECUM1H103ZF	1	Q41028	MSD601-R	1	R41057	ERJ6GEYJ332	1	R41151	ERJ6GEYJ331	1	VR41004	EVN32CA00B15	1
C41102,03	ECUM1H331JCN	2	Q41029,30	2SD602A-R	2	R41058	ERJ6GEYJ222	1	R41152	ERJ6GEYJ3R3	1	VR41005	EVN32CA00B24	1
C41104	ECUM1H101JCN	1	Q41031	2SB644	1	R41059	ERJ6GEYJ822	1	R41153	ERJ6GEYJ122	1	VR41006	EVMF65A00B14	1
C41106-08	ECUM1H103ZF	3	Q41032	2SD639	1	R41062	ERJ6GEYJ392	1	R41154	ERJ6GEYJ3R3	1	VR41007	EVN32CA00B14	1
C41109	ECEA1CKA470	1	Q41033	MSC2295-B	1	R41063	ERJ6GEYJ332	1	R41155	ERJ6GEYJ472	1	VR41008,9	EVN32CA00B23	2
C41110,11	ECUM1H103ZF	2	Q41034	2SD602A-R	1	R41064	ERJ6GEYJ392	1	R41156	ERJ6GEYJ103	1	VR41012-4	EVN32CA00B53	3
C41112,13	ECUM1H331JCN	2	Q41035	2SB793	1	R41065	ERJ6GEYJ332	1	R41157	ERJ6GEYJ122	1	VR41015,6	EVN32CA00B23	2
C41114	ECUM1H101JCN	1	Q41036	2SB710	1	R41066-71	ERJ6GEYJ103	6	R41158	ERJ6GEYJ222	1			
C41116	ECEA1CKA101	1	Q41037	2SD1306	1	R41072,73	ERJ6GEYJ561	2	R41159,60	ERJ6GEYJ153	2			
C41117	ECEA1CKA470	1	Q41038,39	2SD1328-R	2	R41074	ERJ6GEYJ103	1	R41161	ERJ6GEYJ222	1			
C41118	ECEA1CKA101	1	Q41040	2SD1306	1	R41075,76	ERJ6GEYJ331	2	R41162,63	ERJ6GEYJ270	2			
C41119	ECEA1CU471	1	Q41041,42	2SD1328-R	2	R41077	ERJ6GEYJ102	1	R41164	ERJ6GEYJ152	1			
C41120	ECEA1CKA470	1	Q41043	2SD1306	1	R41078	ERJ6GEYJ103	1	R41165	ERJ6GEYJ392	1			
C41121	ECEA1EPH4R7	1	Q41044,45	2SD1328-R	2	R41079	ERJ6GEYJ562	1	R41167	ERJ6GEYJ391	1			
C41122	ECEA1CKA470	1	Q41046	2SD1306	1	R41080	ERJ6GEYJ103	1	R41168	ERJ6GEYJ562	1			
C41123	ECEA1CKA220	1	Q41047,48	2SD1328-R	2	R41081	ERJ6GEYJ105	1	R41169	ERJ6GEYJ222	1			
C41124	ECEA1CKA101	1	Q41049	2SD601	1	R41082	ERJ6GEYJ102	1	R41170	ERJ6GEYJ331	1			
C41130	ECUM1H103ZF	1	Q41050	2SD973	1	R41083,84	ERJ6GEYJ103	2	R41171	ERJ6GEYJ3R3	1			
			Q41051,52	2SD1306	2	R41085	ERJ6GEYJ222	1	R41172	ERJ6GEYJ122	1			
			Q41053	2SB709A-R	1	R41086	ERJ6GEYJ104	1	R41173	ERJ6GEYJ222	1			
						R41087	ERJ6GEYJ102	1	R41174,75	ERJ6GEYJ153	2			
D41001-04	0A90	4	QR41002,3	MRN2403	2	R41088	ERJ6GEYJ182	1	R41176	ERJ6GEYJ3R3	1			
D41005,06	MA3043	2	QR41004,5	MRN1403	2	R41089	ERJ6GEYJ272	1	R41177	ERJ6GEYJ122	1			
D41007,08	MA4068M	2	QR41006,7	MRN1404	2	R41090	ERJ6GEYJ103	1	R41178	ERJ6GEYJ222	1			
D41009	MA151K	1	QR41008	MRN1403	1	R41091-93	ERJ6GEYJ102	3	R41179,80	ERJ6GEYJ270	2			
D41010,11	MA157	2	QR41009	MRN2404	1	R41094	ERJ6GEYJ473	1	R41181	ERJ6GEYJ472	1			
D41012,13	MA3030	2	QR41010,11	MRN1404	2	R41095	ERJ6GEYJ203	1	R41182	ERJ6GEYJ103	1			
D41014	MA3068	1	QR41012	MRN1402	1	R41096	ERJ6GEYJ103	1	R41183	ERJ6GEYJ151	1			
D41015,16	MA151K	2				R41097	ERJ6GEYJ680	1	R41184	ERJ6GEYJ103	1			
D41017	MA153	1				R41098	ERJ6GEYJ104	1	R41185	ERJ6GEYJ182	1			
						R41099	ERJ6GEYJ102	1	R41186	ERJ6GEYJ822	1			
FL41001	VLF0696	1	R41001,02	ERJ6GEYJ562	2	R41100	VRE0034E302	1	R41187	ERJ6GEYJ151	1			
			R41003,04	ERJ6GEYJ102	2	R41101	ERJ6GEYJ562	1	R41188	ERJ6GEYJ183	1			
IC41001	BA7705K1	1	R41005,06	ERJ6GEYJ473	2	R41102	ERJ6GEYJ103	1	R41189	ERJ6GEYJ472	1			
IC41002	AN78N05	1	R41007	ERJ6GEYJ225	1	R41103	ERJ6GEYJ473	1	R41190	ERJ6GEYJ103	1			
IC41003	AN3912	1	R41008,09	ERJ6GEYJ331	2	R41104	ERJ6GEYJ102	1	R41191	ERJ6GEYJ152	1			
IC41004	UPC455862	1	R41010,11	ERJ6GEYJ682	2	R41105,06	ERJ6GEYJ103	2	R41192-94	ERJ6GEYJ103	3			
IC41005	UPC39362	1	R41012	ERJ6GEYJ681	1	R41107,08	ERJ6GEYJ104	2	R41195	ERJ6GEYJ182	1			
IC41006	MC14053BF	1	R41013	VRE0034E112	1	R41109-11	ERJ6GEYJ103	3	R41196	ERJ6GEYJ822	1			
IC41007	UPC455862	1	R41014	VRE0034E103	1	R41112	ERJ6GEYJ222	1	R41197	ERJ6GEYJ183	1			
IC41008	NJM2068MD	1	R41015	ERJ6GEYJ183	1	R41113	ERJ6GEYJ334	1	R41198	ERJ6GEYJ472	1			
IC41009	UPC455862	1	R41016	ERJ6GEYJ562	1	R41115	ERJ6GEYJ103	1	R41199	ERJ6GEYJ152	1			
IC41010-12	MC14053BF	3	R41017	ERJ6GEYJ104	1	R41116	ERJ6GEYJ221	1	R41200-03	ERJ6GEYJ103	4			
IC41013	UPC455862	1	R41018	ERJ6GEYJ303	1	R41117	ERJ6GEYJ223	1	R41204	ERJ6GEYJ182	1			
IC41014	MC14053BF	1	R41019	ERJ6GEYJ123	1	R41118	ERJ6GEYJ102	1	R41205	ERJ6GEYJ822	1			
IC41015	UPC455662	1	R41020	ERJ6GEYJ102	1									
IC41016,17	AN6558S	2	R41021	VRE0034E393	1									



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
C5037,38	ECUM1H103KBN	2		FRONT LED		R62089	ERJ6GEYJ102	1	C1533	ECUM1H103ZFN	1	C2340-44	ECUM1H103ZFN	5
C5039,40	ECUM1H103ZFN	2		[VEP06962A]	0	R62090	ERJ6GEYJ563	1	C1534	ECEA1EGE221	1	C2350	ECEA1CU470	1
C5042	ECEA1HKA010	1		KEY BOARD		R62091	ERJ6GEYJ681	1	C2001	ECEAOJU470	1	C2351	ECUM1H103ZFN	1
C5043	ECUM1H471JCN	1				R62092,93	ERJ6GEYJ683	2	C2002	ECUM1H150JCN	1	C2352,53	ECEA1CU470	2
C5044,45	ECUM1H101JCN	2	C62002	ECEA1CKS470	1	R62094	ERJ6GEYJ563	1	C2003	ECUM1H181JCN	1	C2354	ECUM1H103ZFN	1
C5046	ECUM1H471JCN	1	C62003	ECEA1AKS221	1	R62095,96	ERJ6GEYJ103	2	C2004	ECUM1H101JCN	1	C2355	ECEA1HU010	1
C5047	ECEA1HKA010	1	C62004,05	ECEA1HKS220	2	R62097-01	ERJ6GEYJ223	5	C2005	ECUM1H103ZFN	1	C2401,02	ECUM1H103ZFN	2
C5048	ECUM1H472ZFN	1	C62007	ECUM1H102KBN	1	R62102,03	ERJ6GEYJ103	2	C2006	ECUM1E104ZFN	1	C2403	ECEA1CU470	1
C5056	ECUM1H103ZFN	1	C62008-10	ECUM1H101JCN	3	R62104	ERJ14YJ470	1	C2007	ECEA1AU330	1	C2404,05	ECUM1H330JCN	2
C5066	ECUM1E224ZFN	1	C62011	ECEA1CKS330	1	R62105-07	ERJ14YJ330	3	C2008	ECQB1H683JF	1	C2406-09	ECUM1H103ZFN	4
			C62012	ECUM1H101JCN	1	R62108	ERJ6GEYJ473	1	C2009	ECUM1H103ZFN	1	C2410	ECEAOJU470	1
D5001,02	MA151K	2	C62013	ECEA1AKS221	1	R62109	ERJ6GEYJ103	1	C2010	ECEAOJU470	1	C2501	ECQB1H473JF	1
D5004	MA151K	1	C62014	ECUM1H103ZFN	1	R62110-12	ERJ6GEYJ223	3	C2011	ECEA1AU220	1	C2502	ECQB1H222JF	1
			C62015,16	ECUM1H220JCN	2	R62701-03	ERDS2TJ560	3	C2012	ECEA1CU470	1	C2503	ECQB1H273JF	1
IC5001	AN3334K	1				R62704	ERDS2TJ470	1	C2013-15	ECUM1H103ZFN	3	C2504	ECQB1H222JF	1
IC5002	BA7740FS	1	D62002	MA4056-M	1	R62705-07	ERDS2TJ560	3	C2016,17	ECEAOJU470	2	C2510	ECEA1CU470	1
			D62013-16	MA151K	4	R62708	ERDS2TJ470	1	C2018	ECUM1H103ZFN	1	C2512-14	ECUM1H103ZFN	3
L5001-04	VLQ0460	4	D62018-22	MA151K	5	R62709	ERDS2TJ560	1	C2019	ECEAOJU470	1	C2516-19	ECUM1H103ZFN	4
			D62023-28	MA153	6				C2020	ECUM1H103ZFN	1	C2701	ECEA1CU101	1
P5001	VJP3091	1	D62029-31	MA152K	3	SW62010-3	EVQJQ104K	4	C2021	ECQB1H152JF	1	C2702	ECUM1H820JCN	1
P5002	VJS2603	1	D62032-35	MA151K	4	SW62014,5	VSS0225	2	C2022	ECUM1H103ZFN	1	C2703	ECUM1H561JCN	1
P5003	VJP3091	1	D62036	MA701A	1	SW62016-8	VSS0324	3	C2023	ECQV1H84JZ	1	C2704	ECUM1H271JCN	1
			D62047	MA152K	1	SW62019,0	VSS0225	2	C2024	ECUM1H102JN	1	C2705	ECEA1HU010	1
Q5001	MSB709-R	1	D62048-50	MA151K	3	SW62021	VSS0324	1	C2025	ECUM1H103ZFN	1	C2709	ECEA1HU010	1
Q5002	MSC2295-B	1	D62701-09	MA165VT	9	SW62022,3	VSS0225	2	C2026	ECEA1HU010	1	C2710	ECUM1H103ZFN	1
Q5003	XN4504	1				SW62021	VSP0151	1	C2027	ECEAOJU470	1	C2711	ECQB1H222JF	1
Q5004,05	MSC2295-B	2				SW62502-4	VSP0780	3	C2028	ECUM1H102JCN	1	C2712	ECEA1EU221	1
			DP62001	VSL0312	1	SW62701	VSP0791	1	C2029,30	ECUM1H220JCN	2	C2714	ECQV1H474JZ	1
QR5001	MRN1404	1	IC62001	UPD75236J025	1	SW62702	VSP0792	1	C2031	ECUM1H100DCN	1	C2716,17	ECEA1EU101	2
			IC62002	UPC393G2	1	SW62703	VSP0788	1	C2032	ECEAOJU470	1	C2718	ECQV1H474JZ	1
R5001	ERJ6GEYJ472	1	IC62003	MN1382-R	1	SW62704	VSP0794	1	C2033,34	ECEA1CU100	2	C2722	ECUM1H102JN	1
R5003	ERJ6GEYOR00	1				SW62705	VSP0790	1	C2035	ECEA1HUR47	1	C2723	ECEA1EU221	1
R5004	ERJ6GEYJ101	1	J62005	ERJ6GEYOR00	1	SW62706	VSP0793	1	C2041	ECUM1H121JCN	1	C2724	ECUM1H102JN	1
R5005	ERJ6GEYJ102	1	J62007	ERJ6GEYOR00	1	SW62707	VSP0795	1	C2044,45	ECUM1H271JCN	2	C2725	ECEA1EU221	1
R5006	ERJ6GEYJ152	1				SW62708	VSP0789	1	C2046	ECEA1HUR47	1	C2726	ECEAOJU470	1
R5007	ERJ6GEYJ122	1	L62001	VLQEL05F121K	1	SW62709	VSP0795	1	C2047	ECUM1E104ZFN	1	C2727-30	ECQV1H104JZ	4
R5008	ERJ6GEYJ222	1							C2050	ECUM1H103ZFN	1	C2731-33	ECEA1HN4R7S	3
R5009	ERJ6GEYJ471	1	LD62010,11	LN31GCPHL64	2	X62001	VSX0140	1	C2201	ECEAOJGE470	1	C2734	ECQB1H473JF	1
R5010	ERJ6GEYK1R0	1							C2202,03	ECUM1H103ZFN	2	C2735	ECEAOJU470	1
R5011-14	ERJ6GEYJ182	4	P62001-04	VJP3503	4				C2204,05	ECUM1H220JCN	2	C2736	ECQB1H683JF	1
R5015-18	ERJ6GEYJ100	4	P62005	VJP1236T	1				C2206	ECEAOJU470	1	C2737	ECUM1H103ZFN	1
R5019	ERJ6GEYJ391	1	P62006	VJS2949B010	1				C2207,08	ECUM1H103ZFN	2	C2738	ECEA1CU470	1
R5020,21	ERJ6GEYJ332	2	P62007	VJP3076	1				C2209,10	ECUM1H220JCN	2	C2739	ECEAOJU470	1
R5022	ERJ6GEYJ152	1	P62008	VJP1394	1				C2214	ECUM1H101JCN	1	C2740	ECEA1EU470	1
R5026	ERJ6GEYOR00	1	P62009	VJS2889A018	1				C2215	ECUM1H103ZFN	1	C2741	ECUM1H333KBN	1
R5027	ERJ6GEYJ333	1	P62501	VJS2949B010	1				C2216	ECEAOJU470	1	C2742	ECQB1H104JF	1
R5028	ERJ6GEYG243	1	P62701	VJS2949B018	1				C2217,18	ECUM1H103ZFN	2	C2744-46	ECEA1HU2R2	3
R5029	ERJ6GEYG273	1							C2219	ECEAOJU470	1	C2747-50	ECUM1H333KBN	4
R5030	ERJ6GEYJ391	1	Q62002-05	MSD601-R	4				C2220,21	ECUM1H103ZFN	2	C2751-53	ECUM1H103ZFN	3
R5031	ERJ6GEYJ103	1	Q62006-09	MSB710-R	4				C2222	ECEAOJU470	1	C2754	ECEAOJU470	1
R5032	ERJ6GEYJ473	1							C2223,24	ECUM1H103ZFN	2	C2755-57	ECUM1H102JN	3
R5033	ERJ6GEYJ273	1	QR62001	MRN1404	1				C2225	ECEAOJU470	1	C2758	ECEA1HN4R7S	1
R5034	ERJ6GEYJ153	1							C2226	ECUM1H103ZFN	1	C2759	ECUM1H221JCN	1
R5036	ERJ6GEYJ332	1	R62001	ERJ6GEYJ103	1				C2227	ECEAOJU470	1	C2760	ECEA1HN2R2S	1
R5037,38	ERJ6GEYJ152	2	R62003	ERJ6GEYJ104	1				C2228-30	ECUM1H103ZFN	3	C2761	ECUM1H101JCN	1
R5039	ERJ6GEYJ332	1	R62004-11	ERJ6GEYJ473	8				C2231	ECEAOJU470	1	C2762	ECEA1HU2R2	1
R5040	ERDS2TJ221	1	R62012-19	ERJ6GEYJ103	8				C2232-34	ECUM1H103ZFN	3	C2763	ECEAOJU470	1
R5041	ERJ6GEYJ180	1	R62020-24	ERJ6GEYJ223	5				C2235	ECUM1H820JCN	1	C2764	ECEAOJU220	1
R5042,43	ERJ6GEYJ100	2	R62025	ERJ6GEYJ471	1				C2236	ECQB1H333JF	1	C2765	ECUM1H221JCN	1
R5044,45	ERJ6GEYJ103	2	R62026-36	ERJ6GEYJ103	11				C2237,38	ECEAOJU470	2	C2766	ECEA1HN2R2S	1
R5046,47	ERJ6GEYOR00	2	R62037-40	ERJ6GEYJ223	4				C2239-41	ECUM1H103ZFN	3	C2767	ECUM1H101JCN	1
R5058	ERJ6GEYOR00	1	R62041	ERJ6GEYJ392	1				C2243	ECUM1H103ZFN	1	C2768	ECEA1HU2R2	1
R5059	ERJ6GEYJ473	1	R62042-52	ERJ6GEYJ473	11				C2244	ECEA1CU100	1	C2769,70	ECUM1H102JN	2
R5061	ERJ6GEYOR00	1	R62059	ERJ6GEYJ102	1				C2245-47	ECUM1H103ZFN	3	C2793	ECEA1HU4R7	1
R5062	ERDS2TJ221	1	R62070,71	ERJ14YJ330	2				C2318,19	ECEAOJU470	2	C2804,05	ECEA1EU472	2
			R62076-79	ERJ6GEYJ332	4				C2320	ECUM1H222KBN	1	C2806	ECEA1HU4R7	1
			R62080	ERJ6GEYJ104	1				C2321	ECUM1H103ZFN	1	C60001	ECUM1H103ZFN	1
			R62081	ERJ6GEYJ332	1				C2322	ECEA1HN4R7S	1	C60002,03	ECEA1CU102	2
			R62082	ERJ6GEYJ104	1				C2323	ECUM1H561JCN	1	C60005	ECEAOJU332	1
			R62083	ERJ6GEYJ332	1				C2327,28	ECEAOJU470	2	C60006	ECUM1H103ZFN	1
			R62084	ERJ6GEYJ104	1				C2330	ECQPIH103JZ	1	C60007	ECEA1HU010	1
			R62085	ERJ6GEYJ332	1				C2331	ECQB1H104JF	1	C60008	ECEAOJU470	1
			R62086	ERJ6GEYJ104	1				C2335,36	ECEAOJU470	2	C60009	ECEAOJU332	1
			R62087	ERJ6GEYJ102	1				C2338	ECQB1H103JF	1	C60010	ECQB1H333JF	1
			R62088	ERJ6GEYJ472	1				C2339	ECUM1H331JCN	1	C60011	ECQB1H472JF	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
C60012	ECQB1H103JF	1	D60002	MA170	1	J2203	ERJ6GEYOR00	1	QR2005	MRN1404	1	R2046	ERJ6GEYJ104	1
C60013	ECEA1CU100	1	D60003-06	11EQS04	4	J2206	ERJ6GEYOR00	1	QR2304,05	MRN2402	2	R2047	ERJ6GEYJ332	1
C60016	ECUMIH221JCN	1	D60008	MA3043-M	1	J2401	ERJ6GEYOR00	1	QR2306	MRN1404	1	R2048	ERJ6GEYJ471	1
C60017	ECUMIH103ZFN	1	D60017,02	MA151K	2	J60001	ERJ6GEYOR00	1	QR2308	MRN1404	1	R2049	ERJ6GEYJ103	1
C60018,19	ECUMIH330JCN	2	D60503	10E1	1				QR2309	MRN2404	1	R2051	ERJ6GEYJ101	1
C60020	ECEA1HU010	1	D60504	MA151K	1	K1501	ERJ6GEYOR00	1	QR2310	MRN1403	1	R2054-56	ERJ6GEYJ101	3
C60021	ECEA1HU47	1	D60505	MA170	1	K1502	ERDS2T0	1	QR2311,12	MRN1404	2	R2059,60	ERJ6GEYJ101	2
C60022	ECEA1AU220	1	D60506	MA151K	1	K60002	ERJ6GEYOR00	1	QR2313	MRN2404	1	R2062,63	ERJ6GEYJ101	2
C60023	ECUMIE104ZFN	1							QR2314	MRN1404	1	R2064,65	ERJ6GEYJ103	2
C60024	ECEA0JU682	1	FA2202	VLFI036D101	1	L1501	VLQEL06F101K	1	QR2401	MRN1404	1	R2201	ERJ6GEYJ105	1
C60026	ECUMIE104ZFN	1				L1502,03	VLP0074	2	QR2402	MRN2404	1	R2202	ERJ6GEYJ101	1
C60027	ECUMIH103ZFN	1	FL2201-06	VLFO634	6	L2001,02	VLQEL05S470J	2	QR2501-05	MRN1404	5	R2203	ERJ6GEYJ331	1
C60101	ECUMIH103ZFN	1	FL60001	VLFO630	1	L2004-06	VLQEL05S470J	3	QR2701	MRN1404	1	R2205,06	ERJ6GEYJ473	2
C60102	ECEA1CU470	1				L2007	VLP0054	1	QR2702	MRN2404	1	R2207	ERJ6GEYJ103	1
C60103-06	ECQB1H102JF	4	IC1501	LM393PS	1	L2008	VLQEL05S470J	1	QR2703	MRN1404	1	R2208	ERJ6GEYJ104	1
C60107	ECUMIH151JCN	1	IC1502	AN7912F	1	L2201,02	VLQEL05S2R2K	2	QR2704	MRN1403	1	R2211	ERJ6GEYJ473	1
C60108	ECEA1CU221	1	IC1503	AN7905F	1	L2203-05	VLP0054	3	QR60001	MRN2402	1	R2212	ERJ6GEYJ103	1
C60109	ECUMIH103ZFN	1	IC1505,06	TL431CLP	2	L2206,07	VLQEL05S2R2K	2	QR60002	MRN1403	1	R2213-18	ERJ6GEYJ101	6
C60110,11	ECEA1CU100	2	IC2001	MN6742VCRS	1	L2208	VLQEL05S470J	1	QR60003	MRN2402	1	R2220-23	ERJ6GEYJ101	4
C60112	ECEA1CU470	1	IC2002	MN1382-R	1	L2301-04	VLQEL05S470J	4	QR60004	MRN1404	1	R2240	ERJ6GEYJ473	1
C60501	ECEA1EU47	1	IC2003	BA226F	1	L2401	VLQEL05S470J	1	QR60006-8	MRN1404	3	R2241	ERJ6GEYJ104	1
C60502	ECQB1H104JF	1	IC2004	MC14052BF	1	L2502	VLQEL05S470J	1	QR60010	MRN1404	1	R2242	ERJ6GEYJ101	1
C60503	ECEA1HM101S	1	IC2005	MC14013BF	1	L2701	VLQ0128	1	QR60012	UN2219	1	R2243,44	ERJ6GEYOR00	2
C60504	ECUMIH103ZFN	1	IC2006	TC4530F	1	L2702-04	VLQ0129	3	QR60501	MRN1402	1	R2331	ERJ6GEYJ222	1
C60505	ECEA1EN101S	1	IC2007,08	MN53015VZW	2	L2705-07	VLQEL05S470J	3	QR60502	UN211F	1	R2332	ERJ6GEYJ683	1
C60506	ECEA1CU101	1	IC2009	TC4W53F	1	L2711	VLQEL05S470J	1	QR60503	MRN1404	1	R2333	ERJ6GEYJ101	1
C60507	ECEA0JU470	1	IC2010	LM339NS	1	L60001	VLQEL05S471K	1				R2334	ERJ6GEYJ104	1
C60508,09	ECUMIH101JCN	2	IC2012	MC74HCU04F	1	L60002	VLQEL05S470J	1	R1501	ERDS2TJ181	1	R2335	ERJ6GEYJ333	1
			IC2013	LM358PS-R	1	L60501	VLQEL05S150K	1	R1502	ERJ6GEYJ102	1	R2336	ERJ6GEYJ822	1
			IC2014	TC7S32F	1				R1504	ERDS2TJ181	1	R2337	ERJ6GEYJ242	1
D1502-04	MA151K	3	IC2201	MN19041VSWA	1	P1501	VJP1146	1	R1505	VRE0034E103	1	R2338	ERJ6GEYJ822	1
D1505	MA701A	1	IC2202	L7A0269	1	P1502	VJP3076	1	R1506	VRE0034E473	1	R2339	ERJ6GEYJ104	1
D1507	MA151K	1	IC2203	PCM55HP	1	P1503	VJP1147	1	R1507	VRE0034E222	1	R2340,41	ERJ6GEYJ392	2
D1508	MA3020	1	IC2206	MC14050BF	1	P2201-03	VJS3202B020Z	3	R1509	ERJ6GEYJ102	1	R2342	ERJ6GEYJ681	1
D1509	8P2M	1	IC2207	LM358PS-R	1	P2301	VJP1230T	1	R1510	ERJ6GEYJ331	1	R2343	ERJ6GEYJ473	1
D1510	MA165VT	1	IC2302	NJM4556MB	1	P2701	VJP3078	1	R1511	ERJ6GEYJ224	1	R2344	ERJ6GEYJ563	1
D1511	MA151K	1	IC2303	LM358PS-R	1	P2702	VJP3083	1	R1512-14	ERJ6GEYJ103	3	R2345	ERJ6GEYJ153	1
D1512	VSD0002	1	IC2304	LM393PS	1	P2703	VJS2149W	1	R1515	ERDS2TJ222	1	R2346	ERJ6GEYJ563	1
D1513	AK04	1	IC2305	MC14053BF	1	P60001	VJP1230T	1	R1516-18	ERJ6GEYJ103	3	R2347	ERJ6GEYJ124	1
D1514	MA1270-M	1	IC2310	BA6302AF	1	P60003	VJS3135	1	R1519	ERDS2TJ333	1	R2352	ERJ6GEYJ752	1
D1515	MA185	1	IC2311	MC14053BF	1	P60501	VJS2149W	1	R1520	ERJ6GEYJ332	1	R2353,54	ERJ6GEYJ103	2
D1516	MA4075M	1	IC2312	MC14013BF	1	P60502	VJP1230T	1	R1521	ERDS2TJ221	1	R2355	ERJ6GEYJ752	1
D1517	MA4130M	1	IC2401	MC14013BF	1	P60503	VJS3134	1	R1522	ERDS2TJ181	1	R2356	ERJ6GEYJ104	1
D1518	MA4120-M	1	IC2402	TC4W53F	1				R1525	ERDS2TJ222	1	R2357,58	ERJ6GEYJ272	2
D1519,20	MA151K	2	IC2403,04	TC7S02F	2	Q1501	2SD1474	1	R1526,27	ERJ6GEYJ331	2	R2359	ERJ6GEYJ104	1
D1521,22	MA3160-L	2	IC2405	TC7S08F	1	Q1502	2SD973A-R	1	R1528,29	ERDS2TJ181	2	R2360,61	ERJ6GEYJ222	2
D1523	11EQS04	1	IC2406	M50927-531SP	1	Q1503	2SD1474	1	R1531	ERJ6GEYJ102	1	R2362	ERJ6GEYJ472	1
D1524	MA4047-M	1	IC2501,02	LM324NS	2	Q1504	2SD1273	1	R1532	VRE0034E562	1	R2363	ERJ6GEYJ153	1
D1525,26	MA723VT	2	IC2503	LM393PS	1	Q1505	2SD973A	1	R1533	VRE0034E392	1	R2364	ERJ6GEYJ6913	1
D1528	MA4056M	1	IC2505	MC14053BF	1	Q2001	MSC2295-B	1	R1534	VRE0034E222	1	R2370,71	ERJ6GEYJ103	2
D1529	MA165VT	1	IC2506	MC14052BF	1	Q2302-05	MSD601-R	4	R1535	ERJ6GEYJ123	1	R2372	ERJ6GEYJ153	1
D1530	MA4075M	1	IC2507	MC14053BF	1	Q2703	MSB709-R	1	R1536	ERJ6GEYJ103	1	R2373	ERDS2TJ122	1
D2001	MA151K	1	IC2701	BA6149LS	1	Q2704	2SB1151	1	R2001	ERJ6GEYJ471	1	R2374	ERJ6GEYJ472	1
D2002	MA151WA	1	IC2703	AN3815K	1	Q2705-07	2SD601A-R	3	R2002	ERJ6GEYJ103	1	R2375	ERJ6GEYJ562	1
D2003	MA151K	1	IC2704	XRA6435S	1	Q2709-11	2SB772	3	R2003,04	ERJ6GEYJ333	2	R2376	ERJ6GEYJ561	1
D2006	MA151WA	1	IC2705	LM393PS	1	Q2713-16	MSB709-R	4	R2005-07	ERJ6GEYJ102	3	R2377	ERJ6GEYJ473	1
D2007,08	MA151K	2	IC2706	LM358PS-R	1	Q60001	2SD638	1	R2008	ERJ6GEYJ222	1	R2378	ERJ6GEYJ154	1
D2308	MA151K	1	IC2707	LM393PS	1	Q60002	MSB709-R	1	R2009,10	ERJ6GEYJ223	2	R2379	ERJ6GEYJ104	1
D2309	MA151WK	1	IC2708	LM358PS-R	1	Q60003	2SB819	1	R2013	ERJ6GEYJ332	1	R2380	ERJ6GEYJ101	1
D2310	MA153	1	IC2709	LM393PS	1	Q60004	MSD601-R	1	R2017,18	ERJ6GEYJ103	2	R2381	ERDS2TJ122	1
D2401	MA151K	1	IC2710,11	UPC4556G2	2	Q60005	2SB819	1	R2019	ERJ6GEYJ124	1	R2401	ERJ6GEYJ332	1
D2501,02	MA151K	2	IC2715	AN78N12	1	Q60006	MSD601-R	1	R2020	ERJ6GEYJ103	1	R2402,03	ERJ6GEYJ104	2
D2701	MA4180-L	1	IC60001	TD62503F	1	Q60007	MSD602-R	1	R2021	ERJ6GEYJ683	1	R2404,05	ERJ6GEYJ473	2
D2703	MA4160-L	1	IC60002	MN188166VMCY	1	Q60008	2SD636	1	R2022	ERJ6GEYJ102	1	R2406	ERJ6GEYJ105	1
D2704	11DQ04	1	IC60003	MN1382-R	1	Q60501-03	MSD601-R	3	R2023	ERJ6GEYJ224	1	R2407,08	ERJ6GEYJ473	2
D2705	MA151K	1	IC60007	LM358PS-R	1	Q60504	2SB819	1	R2024,25	ERJ6GEYJ103	2	R2409	ERJ6GEYJ104	1
D2715,16	11DQ04	2	IC60101	LM324NS	1	Q60505	MSD601-R	1	R2026	ERJ6GEYJ184	1	R2410	ERJ6GEYJ473	1
D2717-19	11EQS04	3	IC60501	LM393PS	1	Q60506	2SD1273-Q	1	R2027	ERJ6GEYJ105	1	R2501	ERJ6GEYJ682	1
D2720	MA153	1	IC60502	M54649L	1	Q60507	MSD601-R	1	R2028	ERJ6GEYJ822	1	R2502	ERJ6GEYJ334	1
D2721	11EQS04	1	IC60503	MN1382-R	1	Q60508	2SB941	1	R2029	ERJ6GEYJ102	1	R2503	ERJ6GEYJ274	1
D2722	MA153	1				Q60509	MSD601-R	1	R2030	ERJ6GEYJ223	1	R2504	ERJ6GEYJ123	1
D2723	11EQS04	1	J2001	ERJ6GEYOR00	1				R2031	ERJ6GEYJ224	1	R2505	ERJ6GEYJ334	1
D2727	11EQS04	1	J2003	ERJ6GEYOR00	1	QR1502	MRN2404	1	R2032	ERJ6GEYJ473	1	R2506	ERJ6GEYJ154	1
D2734,35	MA4160-L	2	J2005	ERJ6GEYOR00	1	QR1503	MRN1402	1	R2033	ERJ6GEYJ224	1	R2507-10	ERJ6GEYJ104	4
D2736-38	MA4160-H	3	J2201	ERJ6GEYOR00	1	QR2001-03	MRN1404	3	R2036	ERJ6GEYJ101	1	R2511-15	ERJ6GEYJ104	5
D60001	11EQS04	1												



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
R2516	ERJ6GEYJ393	1	R2838, 39	ERJ6GEYJ103	2	R60526	ERJ6GEYJ683	1	C8205	ECEVOJV470S	1	IC8004-07	MB81C1501PF	4
R2517	ERJ6GEYJ223	1	R2840	ERJ6GEYJ222	1	R60527, 28	ERG1SJ300	2	C8206	ECUM1E104ZFN	1	IC8008	MC74HC574AF	1
R2518-20	ERJ6GEYJ124	3	R2841	ERJ6GEYJ104	1	R60529	ERJ6GEYJ682	1	C8208-11	ECUM1E104ZFN	4	IC8009	HM63021FP	1
R2521	ERJ6GEYJ154	1	R2842, 43	ERJ6GEYJ103	2	R60530	ERJ6GEYJ473	1	C8212	ECEV1HV47R	1	IC8010	UPD65013F101	1
R2522	ERJ6GEYJ104	1	R2844	ERJ6GEYJ222	1				C8213	ECEV1CV470S	1	IC8011	74F86SJ	1
R2523, 24	ERJ6GEYJ102	2	R2845	ERJ6GEYJ104	1	T1501	ETE13K86AY	1	C8214, 15	ECUM1E104ZFN	2	IC8012	MN1382-R	1
R2701	ERJ6GEYJ563	1	R2846-48	ERJ6GEYJ271	3	T60001	EIQ7QF002B	1	C8219	ECUM1E104ZFN	1	IC8013	MC74HC74AF	1
R2709, 10	ERJ6GEYJ103	2	R2849	ERJ6GEYOR00	1				C8220	ECEVOJV470S	1	IC8014	74F86SJ	1
R2711	ERJ6GEYJ154	1	R2850	ERDS2TJ102	1	VR2001	EVN32CA00B54	1	C8221	ECUM1E104ZFN	1	IC8015	MC74HC574AF	1
R2712	ERJ6GEYJ104	1	R2862, 63	ERJ6GEYJ332	2	VR2003	EVN32CA00B15	1	C8222	ECEV1CV470S	1	IC8016	NJM78L05UA	1
R2713	ERJ6GEYJ222	1	R60001	ERJ6GEYJ103	1				C8223	ECUM1E104ZFN	1	IC8051	AN78L09	1
R2714-17	ERJ6GEYJ103	4	R60002	ERD2FCG220	1	X2001	VXSX0296	1	C8225	ECUM1E104ZFN	1	IC8052	AN78L05	1
R2718	ERG2S5J61	1	R60003	ERJ6GEYJ103	1	X2002	VXSX0060	1	C8226	ECEVOJV470S	1	IC8053-55	NJM4565MD	3
R2719	ERDS2TJ270	1	R60004	ERJ6GEYJ183	1	X2201	VXSX0197	1	C8227	ECUM1E104ZFN	1	IC8056	MC74HC574AF	1
R2725	ERJ6GEYJ334	1	R60005	ERJ6GEYJ272	1	X2401	VXSX0086	1	C8228	ECEVOJV470S	1	IC8057	MB40778PF	1
R2727	ERDS2TJ150	1	R60006	ERJ6GEYJ103	1	X2701	VXSX0136	1	C8229-32	ECUM1E104ZFN	4	IC8101	CXD1229Q	1
R2729	ERJ6GEYJ102	1	R60007	ERJ6GEYJ272	1	X60001	VXSX0230	1	C8233	ECEV1HV47V	1	IC8102	SN74LS123NS	1
R2730	ERDS2TJ182	1	R60008	ERJ6GEYJ103	1				C8234	ECEV1CV470S	1	IC8104	SC371021AFU	1
R2731	ERJ6GEYJ103	1	R60009	ERJ6GEYJ183	1				C8235, 36	ECUM1E104ZFN	2	IC8109	MC74HC86F	1
R2732	ERJ6GEYJ153	1	R60010	ERJ6GEYJ471	1				C8238	ECUM1H120JCN	1	IC8110	MC74HC00AF	1
R2733	ERDS2TJ182	1	R60011	ERJ6GEYJ104	1				C8239	ECUM1H221JCN	1	IC8112	SN74LS221NS	1
R2734	ERDS2TJ391	1	R60012	ERJ6GEYJ473	1				C8240	ECUM1E104ZFN	1	IC8114, 15	TC7514F	2
R2735	ERJ6GEYJ103	1	R60013	ERJ6GEYJ471	1		[VEP08159A]		C8241	ECEVOJV470S	1	IC8116	UPD65612BY09	1
R2736	ERJ6GEYJ153	1	R60015	ERJ6GEYJ103	1		TBC (1)		C8242	ECUM1E104ZFN	1	IC8201	NJM78L09UA	1
R2738, 39	ERDS2TJ150	2	R60016	ERJ6GEYJ272	1				C8244-46	ECUM1E104ZFN	3	IC8202	NJM082BM	1
R2740	ERX12SJR68	1	R60017, 18	ERJ6GEYJ103	2	C8001, 02	ECUM1E104ZFN	2	C8247	ECEV1HV47V	1	IC8203	MC14577BFR	1
R2741, 42	ERJ6GEYJ273	2	R60019	ERDS2TJ472	1	C8003	ECEV1CV100S	1	C8248	ECEV1CV470S	1	IC8204	NJM082BM	1
R2743	ERJ6GEYJ122	1	R60020	ERDS2TJ471	1	C8004-12	ECUM1E104ZFN	9	C8252	ECUM1H080DCN	1	IC8205	MC14577BFR	1
R2747	ERJ6GEYJ103	1	R60021-24	ERJ6GEYJ103	4	C8014-20	ECUM1E104ZFN	7	C8253	ECUM1H221JCN	1	IC8206	NJM082BM	1
R2748	ERJ6GEYJ124	1	R60025	ERDS2TJ333	1	C8021	ECEVOJV220S	1	C8254	ECUM1E104ZFN	1	IC8207, 08	TC7566F	2
R2751	ERJ6GEYJ102	1	R60026-29	ERJ6GEYJ103	4	C8051, 52	ECUM1E104ZFN	2	C8301-09	ECUM1E104ZFN	9	IC8210	TC7566F	1
R2752-54	ERDS2TJ330	3	R60030	ERJ6GEYJ102	1	C8053	ECEVOJV470S	1	C8310	ECUM1H050DCN	1	IC8211	MC74HC08AF	1
R2755	ERX12SJR47	1	R60031	ERJ6GEYJ103	1	C8054	ECUM1E104ZFN	1	C8311-13	ECUM1E104ZFN	3	IC8301	ZA4001	1
R2756	ERJ6GEYJ330	1	R60032-35	ERJ6GEYJ473	4	C8055	ECEV1CV220S	1	C8314	ECEVOJV470S	1	IC8302	SC371021AFU	1
R2757	ERJ6GEYJ103	1	R60037	ERD2FCJ487	1	C8056	ECUM1E104ZFN	1	C8315, 16	ECUM1E104ZFN	2	IC8303, 04	MB81C1501PF	2
R2758	ERJ6GEYJ224	1	R60038	ERJ6GEYJ103	1	C8059	ECEV1CV220S	1	C8317	ECEVOJV470S	1	IC8306	MC74HC86F	1
R2759	ERJ6GEYJ223	1	R60039	ERJ6GEYJ473	1	C8060	ECUM1E104ZFN	1	C8318-20	ECUM1E104ZFN	3	IC8308	AN78L05	1
R2760	ERJ6GEYJ184	1	R60040	ERJ6GEYJ101	1	C8062, 63	ECUM1E104ZFN	2	C8322	ECUM1E104ZFN	1	IC8309	MC74HC4053F	1
R2761, 62	ERJ6GEYJ103	2	R60043, 44	ERJ6GEYJ472	2	C8064	ECEV1CV220S	1	C8326	ECUM1E104ZFN	1	IC8312	AN78L05	1
R2763, 64	ERJ6GEYJ473	2	R60045	ERJ6GEYJ103	1	C8065	ECUM1E104ZFN	1	C8401-12	ECUM1E104ZFN	12	IC8401	C624143-4148	1
R2765	ERJ6GEYJ103	1	R60046	ERJ6GEYOR00	1	C8066	ECEVOJV101S	1	C8501	ECQB1H683JF	1	IC8501	MN6755240H7M	1
R2766	ERJ6GEYJ224	1	R60047	ERG1SJ330	1	C8067	ECEV1HV2R2S	1	C8502	ECUM1E104ZFN	1	IC8502	LM358PS-R	1
R2767	ERJ6GEYJ223	1	R60048, 49	ERJ6GEYJ101	2	C8068-79	ECUM1E104ZFN	12	C8503	ECEV1CV470S	1	IC8503	MC14070BF	1
R2768	ERJ6GEYJ184	1	R60055	ERJ6GEYJ103	1	C8101, 02	ECEV1CV470S	2	C8506	ECUM1H103KBN	1	IC8504	MN1382-R	1
R2769, 70	ERJ6GEYJ103	2	R60056	ERJ6GEYJ473	1	C8103	ECUM1E104ZFN	1	C8507, 08	ECUM1H150JCN	2	IC8506	BA225F	1
R2771, 72	ERJ6GEYJ473	2	R60057	ERJ6GEYJ822	1	C8106	ECUM1H471JCN	1	C8509	ECUM1E104ZFN	1			
R2773, 74	ERJ6GEYJ103	2	R60058	ERJ6GEYJ393	1	C8107	ECUM1E104ZFN	1	C8510	ECEV1CV470S	1	L8052, 53	VLQ0319K101	2
R2775	ERJ6GEYJ473	1	R60059	ERJ6GEYJ103	1	C8108	ECUM1H223KBN	1	C8511	ECUM1H223KBN	1	L8101	VLQ0319K101	1
R2776	ERJ6GEYJ472	1	R60060	ERJ6GEYJ684	1	C8109, 10	ECUM1H103KBN	2	C8512	ECQB1H473JF	1	L8102	VLQ0133J471	1
R2777	ERJ6GEYJ334	1	R60101	ERJ6GEYJ102	1	C8111	ECEV1HV3R3S	1	C8513	ECUM1H223KBN	1	L8103	VLQ0163J4R7	1
R2778-82	ERJ6GEYJ103	5	R60102	ERJ6GEYJ302	1	C8112	ECEV1CV100S	1	C8514	ECUM1H101JCN	1	L8201-03	VLQ0319K101	3
R2783	ERJ6GEYJ224	1	R60103-05	ERJ6GEYJ102	3	C8113	ECEV1CV470S	1	C8515	ECUM1E104ZFN	1	L8501	VLQ0319K101	1
R2784	ERJ6GEYJ103	1	R60106	ERJ6GEYJ273	1	C8114	ECUM1H150JCN	1	C8516	ECEV1CV470S	1	L8550, 51	VLP0133	2
R2785	ERJ6GEYJ224	1	R60107	ERJ6GEYJ823	1	C8115	ECUM1H102KBN	1	C8517	ECUM1E104ZFN	1			
R2786, 87	ERJ6GEYJ103	2	R60108-11	ERJ6GEYJ103	4	C8116	ECUM1E104ZFN	1	C8519	ECUM1E104ZFN	1	P934	VJP3176B100	1
R2788	ERJ6GEYJ473	1	R60501	ERJ6GEYJ222	1	C8117	ECUM1H121JCN	1						
R2789	ERJ6GEYJ472	1	R60502, 03	ERJ6GEYJ153	2	C8118	ECUM1H390JCN	1	D8001, 02	MA151K	2	Q8101	MSD601-R	1
R2790	ERJ6GEYJ333	1	R60504	ERJ6GEYJ181	1	C8119	ECUM1E104ZFN	1	D8053	MA3051L	1	Q8102	MSB709-R	1
R2791	ERJ6GEYJ332	1	R60505	ERJ6GEYJ122	1	C8120	ECEV1CV470S	1	D8054	1MA3033-L	1	Q8103	MSD601-R	1
R2792	ERJ6GEYJ103	1	R60506	ERJ6GEYJ182	1	C8121	ECUM1H223KBN	1	D8101	MA335-R	1	Q8201-07	MSD601-R	7
R2793	ERJ6GEYJ473	1	R60507, 08	ERJ6GEYJ222	2	C8122-25	ECUM1E104ZFN	4	D8201-05	MA736	5			
R2794	ERJ6GEYJ472	1	R60509	ERJ6GEYJ681	1	C8126	ECEV1CV470S	1	D8550, 51	11EQS04	2	QR8501, 02	MRN1404	2
R2795	ERJ6GEYJ333	1	R60510, 11	ERJ6GEYJ272	2	C8127	ECEV1HV010S	1						
R2796	ERJ6GEYJ332	1	R60512	ERJ6GEYJ102	1	C8128	ECUM1H332KBN	1	FL8201	ELB4R042	1	R8009	ERJ6GEYJ103	1
R2799, 00	ERJ6GEYOR00	2	R60513	ERJ6GEYJ121	1	C8129	ECUM1E104ZFN	1	FL8202, 03	VLF0757	2	R8051	ERJ6GEYJ303	1
R2803	ERG2S2J21	1	R60514	ERJ6GEYJ183	1	C8131	ECUM1H102KBN	1	FL8550, 51	VLF1016A223	2	R8052	ERJ6GEYJ103	1
R2821	ERDS2TJ822	1	R60515	ERJ6GEYJ474	1	C8134	ECUM1H102KBN	1	FL8553-55	VLF1016A223	3	R8053	ERJ6GEYJ153	1
R2828, 29	ERJ6GEYJ104	2	R60516	ERJ6GEYJ682	1	C8138	ECUM1H102JCN	1	FL8556-59	VLF1016A470	4	R8055	ERJ6GEYJ153	1
R2830	ERDS2TJ391	1	R60517, 18	ERJ6GEYJ821	2	C8139	ECUM1H221JCN	1	FL8560	VLF1016A223	1	R8056	ERJ6GEYJ272	1
R2831	ERDS2TJ561	1	R60519	ERJ6GEYJ181	1	C8140	ECUM1H050DCN	1	FL8561-63	VLF1016A470	3	R8057	ERJ6GEYJ333	1
R2832	ERDS2TJ562	1	R60520, 21	ERJ6GEYJ682	2	C8141	ECUM1H102KBN	1	FL8564-66	VLF1016A223	3	R8060	ERJ6GEYJ203	1
R2833	ERDS2TJ391	1	R60522	ERJ6GEYJ562	1	C8145	ECUM1E104ZFN	1				R8064	ERJ6GEYJ223	1
R2834	ERDS2TJ182	1	R60523	ERJ6GEYJ332	1	C8201	ECEV1CV470S	1	IC8001	CXD1175AM	1	R8066	ERJ6GEYJ471	1
R2835	ERJ6GEYJ471	1	R60524	ERJ6GEYJ103	1	C8202	ECUM1E104ZFN	1	IC8002	MC74HC574AF	1	R8067	ERJ6GEYJ223	1
R2836	ERJ6GEYJ103	1	R60525	ERDS2TJ151	1	C8204	ECUM1E104ZFN	1	IC8003	MN53030VMB	1	R8072-79	ERJ6GEYJ152	8



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
R8080,81	ERJ6GEYJ105	2	R8257	ERJ6GEYOR00	1	C8628	ECEVOJV101S	1	C8832	ECUM1E104ZFN	1	FL8701	VLF1016A223	1
R8082	ERJ6GEYJ103	1	R8258-60	ERJ6GEYJ101	3	C8629	ECUM1H103KBN	1	C8833	ECUM1H150JCN	1	FL8801	VLF0921	1
R8083	ERJ6GEYJ392	1	R8303	ERJ6GEYJ222	1	C8630	ECEVICV470S	1	C8835	ECEVOGV470S	1	FL8802,03	VLF0757	2
R8084	ERJ6GEYJ183	1	R8304	ERJ6GEYJ392	1	C8631	ECUM1H103KBN	1	C8836,37	ECUM1E104ZFN	2			
R8085	ERJ6GEYJ332	1	R8305	ERJ6GEYJ561	1	C8632	ECEVICV470S	1	C8840	ECEVICV470S	1	IC8601	AN91A12S	1
R8101	ERJ6GEYJ104	1	R8309	ERJ6GEYOR00	1	C8633	ECUM1H103KBN	1	C8841	ECEVICV220S	1	IC8602	NE521D	1
R8102	ERJ6GEYJ153	1	R8311	ERJ6GEYJ102	1	C8634	ECEVICV470S	1	C8842,43	ECUM1E104ZFN	2	IC8603,04	MN74HC221S	2
R8103	ERJ6GEYJ222	1	R8403	ERJ6GEYOR00	1	C8635	ECUM1H103KBN	1	C8846	ECUM1H103ZFN	1	IC8605	NJM082BM	1
R8104	ERJ6GEYJ102	1	R8408,09	ERJ6GEYOR00	2	C8636	ECEVICV470S	1	C8847	ECUM1E473KBN	1	IC8606	MN74HC221S	1
R8105	ERJ6GEYJ103	1	R8411,12	ERJ6GEYOR00	2	C8637	ECUM1H103KBN	1	C8848	ECEVICV100S	1	IC8607	MC74HC04AF	1
R8107	ERJ6GEYJ333	1	R8415,16	ERJ6GEYOR00	2	C8640	ECUM1E104ZFN	1	C8849-51	ECUM1E104ZFN	3	IC8608	MC74HC125AF	1
R8108	ERJ6GEYJ105	1	R8418	ERJ6GEYOR00	1	C8641	ECUM1H103KBN	1	C8852	ECEVOGV470S	1	IC8609	NJM082BM	1
R8109	ERJ6GEYJ333	1	R8421,22	ERJ6GEYOR00	2	C8642	ECUM1E104ZFN	1	C8853	ECUM1E104ZFN	1	IC8613	NJM78L09UA	1
R8110	ERJ6GEYJ102	1	R8428	ERJ6GEYOR00	1	C8643	ECEV1HNO10S	1	C8854	ECEV1HVO10S	1	IC8671	MC14053BF	1
R8111	ERJ6GEYJ152	1	R8430	ERJ6GEYOR00	1	C8644	ECUM1E104ZFN	1	C8855	ECEVOJV470S	1	IC8672	NJM082BM	1
R8112	ERJ6GEYJ121	1	R8434	ERJ6GEYJ471	1	C8645	ECEVICV470S	1	C8856	ECUM1E473KBN	1	IC8673	NE521D	1
R8113	ERJ6GEYJ102	1	R8501	ERJ6GEYJ222	1	C8656-60	ECUM1E104ZFN	5	C8857	ECUM1E104ZFN	1	IC8674	NJM78L09UA	1
R8114	ERJ6GEYJ680	1	R8502,03	ERJ6GEYJ102	2	C8662	ECUM1H103KBN	1	C8859-62	ECUM1E104ZFN	4	IC8701	UPD65650J163	1
R8115	ERJ6GEYJ222	1	R8504	ERJ6GEYJ471	1	C8663	ECEVICV470S	1	C8863	ECEVICV100S	1	IC8702	MN74HC221S	1
R8116	ERJ6GEYJ102	1	R8505	ERJ6GEYJ103	1	C8664	ECUM1H103KBN	1	C8864	ECUM1E473KBN	1	IC8703	MC74HC04AF	1
R8117	ERJ6GEYJ222	1	R8506	ERJ6GEYJ124	1	C8665	ECEVICV470S	1	C8865	ECUM1H330JCN	1	IC8704	TC7S08F	1
R8118	ERJ6GEYJ560	1	R8507	ERJ6GEYJ564	1	C8671	ECEVICV470S	1	C8866	ECUM1H271JCN	1	IC8705	NJM082BM	1
R8119	ERJ6GEYJ273	1	R8508	ERJ6GEYJ222	1	C8672	ECUM1E104ZFN	1	C8867	ECUM1H680JCN	1	IC8706	TC7W04F	1
R8120	ERJ6GEYJ473	1	R8509	ERJ6GEYJ103	1	C8673	ECUM1H820JCN	1	C8868	ECUM1H070DCN	1	IC8801	MC14577BF	1
R8121	ERJ6GEYOR00	1	R8510	ERJ6GEYJ222	1	C8674	ECEVICV100S	1	C8869	ECUM1H220JCN	1	IC8802	BA7655AF	1
R8122,23	ERJ6GEYJ102	2	R8511-18	ERJ6GEYJ471	8	C8675	ECUM1E104ZFN	1	C8870	ECUM1H121JCN	1	IC8803	MN74HC221AM	1
R8124	ERJ6GEYJ332	1	R8520	ERJ6GEYJ222	1	C8676	ECUM1H103KBN	1	C8871	ECUM1H100DCN	1	IC8804	MC14577BF	1
R8125	ERJ6GEYJ333	1	R8521-25	ERJ6GEYJ101	5	C8677	ECUM1E104ZFN	1	C8882,83	ECUM1H680JCN	2	IC8805	NJM082BM	1
R8126	ERJ6GEYJ684	1	R8550-81	ERJ6GEYJ471	32	C8678	ECEVICV2R2	1	C8884	ECUM1E104ZFN	1	IC8806	MS1272FP	1
R8128	ERJ6GEYJ272	1				C8679	ECUM1E104ZFN	1	C8885	ECEVOJV470S	1	IC8807	TC7S04F	1
R8133	ERJ6GEYJ102	1	VC8101	VCV0047	1	C8680	ECEVICV470S	1	C8886	ECUM1E104ZFN	1	IC8808	MC14053BF	1
R8138	ERJ6GEYJ471	1				C8681	ECUM1E104ZFN	1	C8887	ECEVOJV470S	1	IC8809	MC14013BF	1
R8139	ERJ6GEYJ223	1	VR8001	EVN32CA00B53	1	C8682	ECUM1H470JCN	1	C8889	ECUM1E104ZFN	1	IC8810	LM358PS	1
R8147	ERJ6GEYJ101	1	VR8002	EVN32CA00B23	1	C8683,84	ECUM1E104ZFN	2	C8890,91	ECUM1H220JCN	2	IC8811	TC4S66F	1
R8148	ERJ6GEYOR00	1	VR8101	EVM7JGA30B13	1	C8685	ECUM1H102JCN	1	C8892	ECUM1E104ZFN	1	IC8812	LM358PS-R	1
R8187	ERJ6GEYJ103	1	VR8102,03	EVM7DSX04B23	2	C8686,87	ECUM1H470JCN	2	C8893,94	ECUM1H220JCN	2			
R8202	ERJ6GEYJ333	1	VR8201	EVM7DSX04B53	1	C8688	ECUM1H103KBN	1	C8895	ECEVOJV470S	1	L8601	VLQ0319K101	1
R8203	ERJ6GEYJ123	1	VR8202	EVM7DSX04B13	1	C8689	ECUM1E104ZFN	1	C8896,97	ECUM1E104ZFN	2	L8602	VLQ0319K221	1
R8205	ERJ6GEYJ273	1	VR8203	EVM7DSX04B53	1	C8690	ECEVICV100S	1	C8898,99	ECUM1H220JCN	2	L8603	VLQ0163J680	1
R8207	ERJ6GEYJ102	1	VR8204,05	EVM7DSX04B13	2	C8691	ECUM1H100DCN	1	C8900	ECEVOJV470S	1	L8604	VLQ0319K470	1
R8209	ERJ6GEYOR00	1	VR8301	EVM7JGA30B13	1	C8692	ECUM1H270JCN	1	C8901,02	ECUM1E104ZFN	2	L8605,06	VLP0133	2
R8211	ERJ6GEYJ104	1	VR8302	EVN32CA00B13	1	C8693	ECUM1E104ZFN	1	C8903	ECUM1H820JCN	1	L8612	VLQ0319K470	1
R8212	ERJ6GEYJ273	1	VR8501	EVN32CA00B54	1	C8701	ECUM1E104ZFN	1	C8904,05	ECUM1E104ZFN	2	L8671	VLQ0319K470	1
R8213	ERJ6GEYJ152	1				C8702	ECEVICN100S	1	C8906	ECUM1H100DCN	1	L8672	VLQ0163J221	1
R8214	ERJ6GEYJ103	1	W8501	ERJ6GEYOR00	1	C8703	ECUM1H102JCN	1	C8907,08	ECUM1E104ZFN	2	L8673	VLQ0319K470	1
R8215	ERJ6GEYJ101	1				C8704	ECUM1H150JCN	1	C8909	ECUM1H271JCN	1	L8674	VLP0133	1
R8216	ERJ6GEYJ105	1	X8501	VXS0519	1	C8705	ECUM1E104ZFN	1	C8910	ECUM1H221JCN	1	L8701	VLQ0319K470	1
R8218,19	ERJ6GEYOR00	2				C8706	ECEVICV100S	1	C8911,12	ECUM1E104ZFN	2	L8702	VLP0145	1
R8221	ERJ6GEYJ273	1				C8707	ECUM1E104ZFN	1	C8913	ECUM1H181JCN	1	L8801,02	VLQ0319K101	2
R8223	ERJ6GEYJ102	1				C8708	ECEVICV100S	1	C8914	ECUM1E104ZFN	1	L8803	VLQ0163J180	1
R8225	ERJ6GEYOR00	1				C8709-13	ECUM1E104ZFN	5	C8915	ECUM1H820JCN	1	L8804	VLQ0163J560	1
R8227	ERJ6GEYJ473	1				C8714	ECUM1H220JCN	1	C8920	ECUM1E104ZFN	1	L8805	VLQ0163J470	1
R8228	ERJ6GEYJ273	1				C8715	ECUM1H820JCN	1	C8921	ECEVICV100S	1	L8806,07	VLQ0319K101	2
R8229	ERJ6GEYJ152	1				C8716-20	ECUM1E104ZFN	5	C8922	ECUM1E104ZFN	1	L8812	VLQ0319K101	1
R8230	ERJ6GEYJ103	1				C8722	ECUM1H102JCN	1	C8923	ECEVOGV470S	1	L8813	VLQ0163J270	1
R8231	ERJ6GEYJ101	1				C8723	ECUM1H151JCN	1	C8924	ECEVOJV470S	1	L8814	VLQ0163J68	1
R8232	ERJ6GEYJ105	1	C8601,02	ECUM1H103KBN	2	C8801	ECUM1H101JCN	1	C8926-28	ECUM1E104ZFN	3	L8815	VLQ0163J5R6	1
R8235	ERJ6GEYJ273	1	C8603	ECUM1H181JCN	1	C8802	ECUM1H102JCN	1	C8930	ECUM1E104ZFN	1	L8818,19	VLQ0319K101	2
R8236	ERJ6GEYJ102	1	C8604	ECUM1H103KBN	1	C8803	ECEVOJV470S	1	C8932	ECUM1H470JCN	1	L8820,21	VLQ0163J470	2
R8238	ERJ6GEYOR00	1	C8605	ECUM1E104ZFN	1	C8804,05	ECUM1E104ZFN	2	C8938	ECEVICV100S	1	L8822	VLQ0319K101	1
R8240	ERJ6GEYJ473	1	C8606,07	ECEVICV470S	2	C8806	ECEVOJV470S	1	C8939	ECUM1E104ZFN	1	L8823	VLQ0163J470	1
R8241	ERJ6GEYJ273	1	C8608	ECUM1E104ZFN	1	C8807,08	ECUM1E104ZFN	2	C8940,41	ECUM1H120JCN	2	L8824-27	VLQ0319K101	4
R8242	ERJ6GEYJ152	1	C8609	ECUM1H180JCN	1	C8809,10	ECEVOGV470S	2				L8828,29	VLQ0163J100	2
R8243	ERJ6GEYJ153	1	C8610	ECUM1H680JCN	1	C8813-15	ECUM1E104ZFN	3						
R8244	ERJ6GEYJ101	1	C8611,12	ECUM1E104ZFN	2	C8816	ECEVOGV470S	1	D8601	MA151WK	1			
R8245	ERJ6GEYJ105	1	C8613	ECEV1HNO10S	1	C8817	ECEVOGV470S	1	D8604,05	MA723	2	P8933	VJP3176B100	1
R8246	ERJ6GEYJ152	1	C8614	ECUM1H330JCN	1	C8819	ECUM1E104ZFN	1	D8671	MA151K	1			
R8247	ERJ6GEYJ392	1	C8615	ECUM1E104ZFN	1	C8820	ECUM1H151JCN	1	D8672	MA335-R	1	Q8671	MSB709-R	1
R8248	ERJ6GEYJ223	1	C8616,17	ECUM1H101JCN	2	C8821	ECUM1H471JCN	1	D8673	MA151K	1	Q8672,73	2SK608-Q	2
R8249	ERJ6GEYJ152	1	C8618	ECUM1H220JCN	1	C8822,23	ECEV1HVO10S	2	D8701	MA151K	1	Q8701	MSD601-R	1
R8250	ERJ6GEYJ392	1	C8619	ECUM1H470JCN	1	C8824	ECUM1H180JCN	1	D8801,02	MA335-R	2	Q8801-03	MSD601-R	3
R8251,52	ERJ6GEYJ223	2	C8620-22	ECUM1E104ZFN	3	C8826	ECUM1H101JCN	1	D8803	MA151K	1	Q8804	MSB709-R	1
R8253	ERJ6GEYJ152	1	C8623	ECUM1H390JCN	1	C8827	ECUM1E104ZFN	1	D8804	MA723	1	Q8805,06	MSD601-R	2
R8254	ERJ6GEYJ392	1	C8624	ECUM1E104ZFN	1	C8828	ECEVOJV101S	1				Q8808,09	MSD601-R	2
R8255	ERJ6GEYJ152	1	C8625	ECEVICV470S	1	C8829	ECUM1E104ZFN	1	FL8601-05	VLF1016A223	5	Q8810	2SA1022-B	1
			C8626,27	ECUM1H150JCN	2	C8830	ECEVOJV101S	1	FL8671	VLF1016A223	1	Q8811	MSD601-R	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
Q8812	2SA1022-B	1	R8736	ERJ6GEYJ101	1	R8892	ERJ6GEYJ102	1	VR8807,08	EVN32CA00B23	2	C6605	ECEA1KA101	1
Q8813-15	MSD601-R	3	R8737	ERJ6GEYJ152	1	R8893	ERJ6GEYJ332	1	VR8810,11	EVN32CA00B53	2	C6606,07	ECUM1E104ZFN	2
Q8816	MSB709-R	1	R8739	ERJ6GEYOR00	1	R8894	ERJ6GEYJ821	1	VR8814	EVN32CA00B13	1	C6611	ECUM1H103ZFN	1
Q8817	MSC2295-B	1	R8740	ERJ6GEYJ102	1	R8895	ERJ6GEYJ472	1	VR8815	EVN32CA00B52	1	C6612	ECEA0JKA470	1
Q8818,19	MSB709-R	2	R8741	ERJ6GEYJ104	1	R8896	ERJ6GEYJ102	1				C6613	ECUM1H103ZFN	1
Q8820	MSC2295-B	1	R8801,02	ERJ6GEYJ102	2	R8897	ERJ6GEYJ181	1	X8601	VSX0338	1	C6614	ECEA0JKA470	1
Q8821	MSB709-R	1	R8803	ERJ6GEYJ470	1	R8898	ERJ6GEYJ821	1	X8671	VSX0081	1	C6615	ECUM1H103ZFN	1
Q8822	MSC2295-B	1	R8804	ERJ6GEYJ332	1	R8899	ERJ6GEYJ152	1				C6616	ECEA1CKA470	1
Q8823	MSB709-R	1	R8805	ERJ6GEYJ103	1	R8900	ERJ6GEYJ470	1				C6621,22	ECUM1H103ZFN	2
Q8824,25	MSD601-R	2	R8806	ERJ6GEYJ470	1	R8901	ERJ6GEYJ102	1				C6623	ECEA0JKA470	1
Q8827,28	MSD601-R	2	R8807	ERJ6GEYJ821	1	R8902	ERJ6GEYJ471	1				C6624	ECEA0JKA470	1
Q8832	XN1213	1	R8808	ERJ6GEYJ472	1	R8903	ERJ6GEYJ102	1				C6628-36	ECUM1E104ZFN	9
			R8809	ERJ6GEYJ470	1	R8904	ERJ6GEYJ122	1				C6637-39	ECEA0JKA470	3
R8601	ERJ6GEYJ224	1	R8810-12	ERJ6GEYJ102	3	R8905	ERJ6GEYJ152	1		[VEP04424A]		C6640	ECUM1E104ZFN	1
R8602	ERJ6GEYJ684	1	R8813	ERJ6GEYJ470	1	R8906-08	ERJ6GEYJ223	3		XLR M		C6641	ECEA0JKA470	1
R8603	ERJ6GEYJ103	1	R8814	ERJ6GEYJ102	1	R8909	ERJ6GEYJ152	1	J6722-25	VJP3417	4	C6642	ECUM1H103ZFN	1
R8604,05	ERJ6GEYJ822	2	R8815	ERJ6GEYJ103	1	R8910	ERJ6GEYJ102	1				C6643	ECEA1HKS010	1
R8606	ERJ6GEYJ221	1	R8816	ERJ6GEYJ470	1	R8911	ERJ6GEYJ154	1	P6706	VJP1246T	1	C6644	ECEA0JKA470	1
R8607-10	ERJ6GEYJ222	4	R8817	ERJ6GEYJ821	1	R8912	ERJ6GEYJ152	1	P6707	VJP1247T	1	C6645	ECUM1H103ZFN	1
R8611	ERJ6GEYJ683	1	R8818	ERJ6GEYJ472	1	R8913	ERJ6GEYJ102	1				C6646	ECEA0JKA470	1
R8612	ERJ6GEYJ184	1	R8822	ERJ6GEYJ471	1	R8914	ERJ6GEYJ122	1				C6647	ECEA0JKA470	1
R8613,14	ERJ6GEYJ222	2	R8823	ERJ6GEYJ221	1	R8915	ERJ6GEYJ330	1				C6648	ECUM1H103ZFN	1
R8615	ERJ6GEYJ563	1	R8824	ERJ6GEYJ470	1	R8916	ERJ6GEYJ681	1				C6649	ECEA0JKA470	1
R8616	ERJ6GEYJ822	1	R8825	ERJ6GEYJ271	1	R8917	ERJ6GEYJ105	1				C6650	ECEA1HKA470	1
R8617	ERJ6GEYJ682	1	R8826	ERJ6GEYJ332	1	R8918	ERJ6GEYJ154	1		[VEP04425A]		C6651	ECUM1H150JCN	1
R8618	ERJ6GEYJ563	1	R8827	ERJ6GEYJ102	1	R8919	ERJ6GEYJ152	1		XLR F		C6652	ECUM1H270JCN	1
R8619	ERJ6GEYJ684	1	R8828	ERJ6GEYOR00	1	R8920	ERJ6GEYJ103	1				C6653,54	ECUM1H220JCN	2
R8620	ERJ6GEYJ392	1	R8829	ERJ6GEYJ470	1	R8921,22	ERJ6GEYJ102	2	J6726-29	VJS3417	4	C6655,56	ECUM1H330JCN	2
R8621	ERJ6GEYJ272	1	R8830	ERJ6GEYJ332	1	R8923	ERJ6GEYJ122	1				C6657	ECUM1H103ZFN	1
R8622,23	ERJ6GEYJ102	2	R8831	ERJ6GEYJ470	1	R8924	ERJ6GEYJ181	1	P6708	VJP1246T	1	C6658	ECEA0JKA470	1
R8624	ERJ6GEYJ122	1	R8832	ERJ6GEYJ682	1	R8925	ERJ6GEYJ152	1	P6709	VJP1247T	1	C6659	ECUM1H103ZFN	1
R8625	ERJ6GEYJ823	1	R8833	ERJ6GEYJ102	1	R8926	ERJ6GEYJ470	1				C6660	ECEA0JKA470	1
R8626	ERJ6GEYJ103	1	R8834	ERJ6GEYJ152	1	R8927	ERJ6GEYOR00	1				C6661	ECUM1H102KBN	1
R8628	ERJ6GEYJ153	1	R8836	ERJ6GEYJ561	1	R8940	ERJ6GEYJ102	1				C6662-64	ECUM1E104ZFN	3
R8630	ERJ6GEYJ104	1	R8838	ERJ6GEYJ222	1	R8941	ERJ6GEYJ242	1				C6665,66	ECUM1H103ZFN	2
R8631	ERJ6GEYJ105	1	R8839	ERJ6GEYJ470	1	R8942	ERJ6GEYJ124	1						
R8635	ERJ6GEYJ473	1	R8840	ERJ6GEYJ472	1	R8943	ERJ6GEYJ682	1		[VEP06906A]		CT6601	ECV1ZW20X60	1
R8671	ERJ6GEYJ222	1	R8841	ERJ6GEYJ102	1	R8944	ERJ6GEYJ102	1		9P IN CONNECT				
R8672	ERJ6GEYJ152	1	R8842	ERJ6GEYJ122	1	R8945	ERJ6GEYJ683	1				D4001	MA151WA	1
R8673	ERJ6GEYJ103	1	R8843	ERJ6GEYJ222	1	R8947	ERJ6GEYJ104	1	P69005	VJP3088	1	D4002	MA151WK	1
R8674	ERJ6GEYJ102	1	R8844	ERJ6GEYOR00	1	R8948	ERJ6GEYJ682	1	P69006	VJS2074	1	D4003	MA151WA	1
R8675	ERJ6GEYOR00	1	R8846	ERJ6GEYJ223	1	R8952	ERJ6GEYJ471	1				D4004	MA151WK	1
R8677	ERJ6GEYJ333	1	R8849	ERJ6GEYJ122	1	R8953,54	ERJ6GEYJ101	2				D4005	MA151WA	1
R8678	ERJ6GEYJ273	1	R8850	ERJ6GEYJ183	1	R8955-57	ERJ6GEYJ332	3				D4006	MA151WK	1
R8679	ERJ6GEYJ223	1	R8851	ERJ6GEYJ273	1	R8958	ERJ6GEYJ392	1				D4007	MA151WA	1
R8680	ERJ6GEYJ105	1	R8853	ERJ6GEYJ332	1	R8959-63	ERJ6GEYJ470	5				D4008	MA151WK	1
R8681	ERJ6GEYJ102	1	R8855	ERJ6GEYJ183	1	R8964,65	ERJ6GEYJ103	2		[VEP06908A]		D4017	MA153A	1
R8682	ERJ6GEYJ473	1	R8856	ERJ6GEYJ273	1	R8966	ERJ6GEYJ470	1		REAR AMP		D6601,02	MA151K	2
R8683	ERJ6GEYJ822	1	R8857	ERJ6GEYOR00	1	R8968	ERJ6GEYJ222	1				D6603	MA28W-A	1
R8684	ERJ6GEYJ153	1	R8860	ERJ6GEYJ301	1	R8969	ERJ6GEYJ470	1	C4001-04	ECEA1CSN100	4			
R8685,86	ERJ6GEYJ473	2	R8861	ERJ6GEYJ470	1	R8971	ERJ6GEYJ471	1	C4007-10	ECEA1CSN100	4	IC4001-03	NJM4556MB	3
R8687,88	ERJ6GEYJ332	2	R8862	ERJ6GEYJ301	1	R8973	ERJ6GEYJ471	1	C4014	ECEA1CKA470	1	IC4004	AN6558S	1
R8689	ERJ6GEYJ102	1	R8864,65	ERJ6GEYJ472	2	R8974	ERJ6GEYJ102	1	C4015	ECEA1CKA101	1	IC4005-07	NJM4556MB	3
R8690	ERJ6GEYJ272	1	R8866	VRE0034E122	1	R8975,76	ERJ6GEYJ105	2	C4016	ECEA1CKS470	1	IC4008	AN6558S	1
R8691	ERJ6GEYJ123	1	R8867	VRE0034E272	1	R8979	ERJ6GEYJ683	1	C4017	ECEA1CKS101	1	IC4014-17	NJM4556MB	4
R8692	ERJ6GEYJ821	1	R8869	ERJ6GEYJ222	1	R8980	ERJ6GEYJ912	1	C4018	ECEA1CKA470	1	IC6601	NJM2233BMA	1
R8693	ERJ6GEYJ152	1	R8870	VRE0034E122	1	R8982	ERJ6GEYJ102	1	C4019	ECEA1CKA101	1	IC6605-08	MC14577BF	4
R8702	ERJ6GEYOR00	1	R8871	VRE0034E272	1	R8983	ERJ6GEYJ152	1	C4020	ECEA1CSN100	1	IC6609	MC14576BF	1
R8703	ERJ6GEYJ562	1	R8873	ERJ6GEYJ222	1				C4021	ECEA1CKA470	1	IC6610	MN1280P	1
R8704	ERJ6GEYJ103	1	R8875	ERJ6GEYJ102	1	SW8701	VSR0045	1	C4022	ECEA1VKS470	1	IC6611	MS0455-001SP	1
R8705	ERJ6GEYJ684	1	R8876	ERJ6GEYJ472	1				C4023	ECEA1CSN100	1	IC6612	TC45S84F	1
R8706	ERJ6GEYJ273	1	R8877	ERJ6GEYJ471	1	TH8801	ERTD2FHL102S	1	C4024,25	ECEA1EKA470	2			
R8707	ERJ6GEYJ563	1	R8878	ERJ6GEYJ472	1				C4026	ECEA1CSN100	1	L6601-07	VLQEL05K101J	7
R8708	ERJ6GEYJ472	1	R8880	ERJ6GEYJ102	1	VC8671	ECV1ZW20X60	1	C4027,28	ECEA1EKA470	2	L6608	VLQEL05K330J	1
R8709	ERJ6GEYJ682	1	R8881	ERJ6GEYJ821	1				C4029	ECEA1CSN100	1	L6609,10	VLQEL05K560J	2
R8710	ERJ6GEYJ104	1	R8882	ERJ6GEYJ471	1	VR8601	EVN32CA00B54	1	C4030,31	ECEA1EKA470	2	L6611	VLQEL05K150J	1
R8713	ERJ6GEYOR00	1	R8883	ERJ6GEYJ472	1	VR8602	EVN32CA00B53	1	C4034	ECEA1CKS101	1	L6612	VLQEL05K101J	1
R8715	ERJ6GEYOR00	1	R8884	ERJ6GEYJ102	1	VR8603	EVN32CA00B14	1	C4035	ECEA1CKA220	1			
R8717-21	ERJ6GEYJ101	5	R8885	ERJ6GEYOR00	1	VR8671	EVN32CA00B23	1	C4036-41	ECEA1CKA100	6	P4006	VJP3490B13	1
R8722-27	ERJ6GEYJ560	6	R8886	ERJ6GEYJ102	1	VR8701	EVN32CA00B53	1	C4042,43	ECEA1CKS100	2	P4007,08	VJP3092	2
R8728	ERJ6GEYJ102	1	R8887	ERJ6GEYJ470	1	VR8801,02	EVN32CA00B14	2	C4044	ECEA1CKA470	1	P4009	VJP3490B13	1
R8729	ERJ6GEYJ152	1	R8888	ERJ6GEYJ332	1	VR8803	EVN32CA00B13	1	C4045	ECEA1CKA101	1	P6601	VJS1490	1
R8731,32	ERJ6GEYJ560	2	R8889	ERJ6GEYJ102	1	VR8804	EVN32CA00B23	1	C4046-49	ECUM1H330JCN	4	P6602,03	VJP3490B13	2
R8733,34	ERJ6GEYJ471	2	R8890	ERJ6GEYOR00	1	VR8805	EVN32CA00B24	1	C6601,02	ECEA1KA470	2	P6604	VJS1468	1
R8735	ERJ6GEYJ560	1	R8891	ERJ6GEYJ470	1	VR8806	EVN32CA00B13	1	C6604	ECUM1E104ZFN	1	P6605	VJS1490	1



Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs	Ref.No.	Part No.	Pcs
P6606	VJP3076	1	R4134, 35	ERJ6GEYJ332	2	R6671	ERJ6GEYJ221	1						
P6607	VJP1243T	1	R4136	ERJ6GEYJ822	1	R6672	ERJ6GEYJ103	1						
P6608	VJS1488	1	R4137	ERJ6GEYJ470	1	R6673	ERJ6GEYJ561	1						
			R4138	ERJ6GEYJ912	1									
Q4001-08	MSD601-R	8	R4139, 40	ERJ6GEYJ332	2	SW4004, 05	VSS0208	2						
Q4010	2SD601-R	1	R4141	ERJ6GEYJ822	1									
Q4011	2SB710-R	1	R4142	ERJ6GEYJ562	1	VR4005-08	EVN32CA00B53	4						
Q4015-17	2SD1306	3	R4143	ERJ6GEYJ102	1									
Q4021-23	2SD1306	3	R4144	ERJ6GEYJ470	1	X6601	VSX0197	1						
Q4027-29	2SD1306	3	R4145-49	ERJ6GEYJ103	5									
Q4033-35	2SD1306	3	R4159	ERJ6GEYJ473	1									
Q4036	MSB710-R	1	R4160, 61	ERJ6GEYJ332	2									
Q4037	2SB710-R	1	R4162	ERJ6GEYJ822	1									
Q4038	2SD602-R	1	R4163	ERJ6GEYJ470	1									
Q6601-03	MSD601-R	3	R4164, 65	ERJ6GEYJ332	2		[VEP06909A]							
Q6606	MSB709-R	1	R4166	ERJ6GEYJ562	1		REAR JACK							
Q6609, 10	XR4501	2	R4167	ERJ6GEYJ102	1									
Q6611	MSD601-R	1	R4168	ERJ6GEYJ103	1	J6701-04	VJS3154	4						
Q6612	XR4401	1	R4169	ERJ6GEYJ822	1	J6705	VJS3155	1						
Q6613	MSB709-R	1	R4170	ERJ6GEYJ470	1	J6709	VJP3414A015	1						
			R4171	ERJ6GEYJ103	1	J6711-13	VJS3154	3						
QR6603	MRN1404	1	R4172	ERJ6GEYJ912	1	J6714, 15	VJS3155	2						
QR6605	MRN2404	1	R4173-75	ERJ6GEYJ103	3	J6716-18	VJS3154	3						
QR6606, 07	MRN1404	2	R4185	ERJ6GEYJ473	1	J6719	VJJ0322	1						
			R4186, 87	ERJ6GEYJ332	2	J6720, 21	VJS3154	2						
R4001	ERJ6GEYJ681	1	R4188	ERJ6GEYJ822	1									
R4002, 03	ERJ6GEYJ473	2	R4189	ERJ6GEYJ912	1	P6701	VJS3215B012	1						
R4004, 05	ERJ6GEYJ822	2	R4190	ERJ6GEYJ470	1	P6702	VJS3215B008	1						
R4006, 07	ERJ6GEYJ104	2	R4191, 92	ERJ6GEYJ332	2	P6703	VJS3215B012	1						
R4008	VRE0034E332	1	R4193	ERJ6GEYJ822	1	P6704	VJS3215B010	1						
R4009-14	VRE0034E472	6	R4194	ERJ6GEYJ562	1									
R4015	ERJ6GEYJ473	1	R4195	ERJ6GEYJ102	1	R6701, 02	EROS2CKG75R0	2						
R4016	ERJ6GEYJ681	1	R4196	ERJ6GEYJ470	1	R6704-06	EROS2CKG75R0	3						
R4017	ERJ6GEYJ473	1	R4197-01	ERJ6GEYJ103	5	R6707	EROS2CKG68R0	1						
R4018, 19	ERJ6GEYJ822	2	R4204	ERJ6GEYJ104	1	R6708-14	EROS2CKG75R0	7						
R4020, 21	ERJ6GEYJ104	2	R4205	ERJ6GEYJ563	1									
R4022	VRE0034E332	1	R4206, 07	ERJ6GEYJ151	2	SW6701, 02	VSS0303	2						
R4023-28	VRE0034E472	6	R4208-11	ERJ6GEYJ562	4	SW6705, 06	VSS0390	2						
R4029	ERJ6GEYJ103	1	R6601	ERJ6GEYJ332	1									
R4030	ERJ6GEYJ183	1	R6602	ERJ6GEYJ470	1									
R4032-35	ERJ6GEYJ103	4	R6604	ERJ6GEYJ750	1									
R4036	ERJ6GEYJ183	1	R6605	ERJ6GEYJ221	1									
R4038-40	ERJ6GEYJ103	3	R6606	ERJ6GEYJ102	1									
R4041	ERJ6GEYJ681	1	R6607	ERJ6GEYJ470	1									
R4042, 43	ERJ6GEYJ473	2	R6608	ERJ6GEYJ102	1		[VEK2657]							
R4044, 45	ERJ6GEYJ822	2	R6609	ERJ6GEYJ472	1		TENSION							
R4046, 47	ERJ6GEYJ104	2	R6610	ERJ6GEYJ272	1		SENSOR							
R4048	VRE0034E332	1	R6618	ERJ6GEYJ221	1	P2504	VJS1230T	1						
R4049-54	VRE0034E472	6	R6619	ERJ6GEYJ102	1									
R4055	ERJ6GEYJ681	1	R6620	ERJ6GEYJ470	1									
R4056, 57	ERJ6GEYJ473	2	R6621, 22	VRE0034E102	2									
R4058, 59	ERJ6GEYJ822	2	R6623	ERJ6GEYJ104	1									
R4060, 61	ERJ6GEYJ104	2	R6624-26	ERJ6GEYJ103	3									
R4062	VRE0034E332	1	R6628-31	VRE0034E471	4									
R4063-68	VRE0034E472	6	R6632, 33	ERJ6GEYJ103	2									
R4069	ERJ6GEYJ103	1	R6639-48	VRE0034E471	10									
R4070	ERJ6GEYJ183	1	R6649	ERJ6GEYJ152	1									
R4072-76	ERJ6GEYJ103	5	R6650	ERJ6GEYJ474	1									
R4077	ERJ6GEYJ183	1	R6652	ERJ6GEYJ104	1									
R4079-82	ERJ6GEYJ103	4	R6653	ERJ6GEYJ562	1									
R4094, 95	ERJ6GEYJ103	2	R6654, 55	ERJ6GEYJ152	2									
R4096, 97	ERJ6GEYJ151	2	R6656	ERJ6GEYJ271	1									
R4107	ERJ6GEYJ332	1	R6657	ERJ6GEYJ102	1									
R4108	ERJ6GEYJ473	1	R6658	ERJ6GEYJ681	1									
R4109	ERJ6GEYJ332	1	R6659	ERJ6GEYJ272	1									
R4110	ERJ6GEYJ822	1	R6660	ERJ6GEYJ391	1									
R4111	ERJ6GEYJ912	1	R6662	ERJ6GEYJ471	1									
R4112	ERJ6GEYJ470	1	R6663	ERJ6GEYJ222	1									
R4113, 14	ERJ6GEYJ332	2	R6664	ERJ6GEYJ272	1									
R4115	ERJ6GEYJ822	1	R6665	ERJ6GEYJ182	1									
R4116	ERJ6GEYJ562	1	R6666	ERJ6GEYJ332	1									
R4117	ERJ6GEYJ102	1	R6667	ERJ6GEYJ223	1									
R4118	ERJ6GEYJ470	1	R6668	ERJ6GEYJ103	1									
R4119-23	ERJ6GEYJ103	5	R6669	ERJ6GEYJ124	1									
R4133	ERJ6GEYJ473	1	R6670	ERJ6GEYJ102	1									



**Panasonic®**

Printed in Japan  
H2750403NTN



# Service Manual

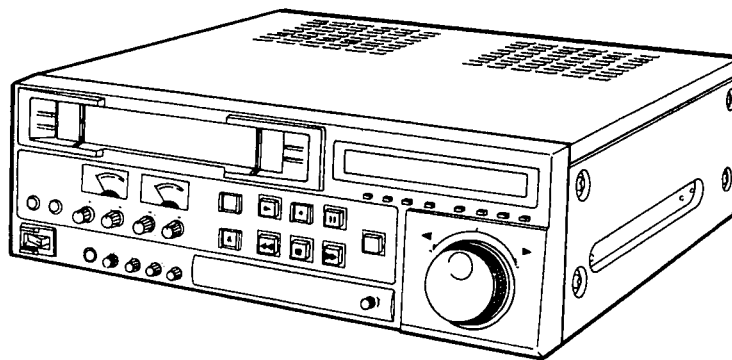
## Volume 2

**Panasonic** **S** **VHS** **Hi-Fi**

Editing Video Cassette Recorder

**AG-DS850P**

- Sec. 6** *Mechanism*
- Sec. 7** *Electrical Adjustment*
- Sec. 8** *Block Diagrams*
- Sec. 9** *Supplement (Voltage table)*



The Operating Instructions (Sec. 1), Disassembly Procedures (Sec. 2), Schematic Diagrams (Sec. 3), Circuit Board Diagrams (Sec. 4), and Exploded Views & Replacement Parts Lists (Sec. 5), please refer to the Service Manual Volume 1 (Order No. VSD9404M244).

The detail circuit description for this model, please refer to the Supplement Service Manual (Order No. VSD9404D209).

**Panasonic**®



## ⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

## SPECIFICATIONS

ITEM			SPECIFICATION		ITEM	SPECIFICATION		
Power	Source	AC 120V $\pm$ 10%, 50-60Hz		Heads	Normal Audio Control; 1 stationary head Hi-Fi Audio; 2 rotary heads (42 $\mu$ m $\times$ 2) Erase; 1 full track erase, 1 Audio track erase			
	Consumption	Approx. 87 Watts (with AG-A750)			Tracks	Normal audio; 2 track (stereo) Hi-Fi Audio; 2 channels (stereo)		
Television Format	EIA Standard (525 lines, 60fields) NTSC color signal			Input level		LINE IN Hi-Fi (XLR): + 4/0/ - 6dBs, Hi-imp. balanced LINE IN NORM/ Hi-Fi (XLR): + 4/0/ - 6dBs, Hi-imp. balanced MICROPHONE IN (1/4" PHONE $\times$ 2); - 50dBv, 4.7k $\Omega$ unbalanced		
Tape Speed	33.35mm/ s (1-15/16 i.p.s)				Output level	LINE OUT Hi-Fi (XLR): + 4/0/ - 6dBs, Hi-imp. balanced LINE OUT NORM/ Hi-Fi (XLR): + 4/0/ - 6dBs, Hi-imp. balanced HEADPHONES (1/4" PHONE) - 60dBv to - 20dBv, 8 $\Omega$ unbalanced AUDIO MONITOR OUT (PHONO); 0dBv, 600 $\Omega$ unbalanced		
Tape Format	S-VHS, VHS					Frequency Response	Normal; 50Hz to 12kHz Hi-Fi; 20Hz to 20kHz	
FF/REW	Approx. 2.5min. (with 120min. tape)						Dynamic Range	Hi-Fi; more than 90 dB
Video	Head	2 rotary heads, helical scanning system 58 $\mu$ m (NOR) $\times$ 2, 58 $\mu$ m (SS) $\times$ 2 2 flying (rotary) erase heads 56 $\mu$ m $\times$ 2		S/N Ratio		48dB (Normal) (with NR switch ON)		
	Luminance	FM azimuth recording			Time Code	Input Level 1.0Vp-p, 10k $\Omega$ unbalanced Output level 2.4Vp-p, low impedance unbalanced		
	Color signal	Converted subcarrier phase shift recording				Standard Accessories	Power Cable VJA0472	
	Input level	LINE (BNC); 1.0Vp-p, 75 $\Omega$ unbalanced S-VIDEO (4P); Y: 1.0Vp-p, 75 $\Omega$ unbalanced C: 0.286Vp-p (burst), 75 $\Omega$ unbalanced REF IN (BNC): 1.0Vp-p, 75 $\Omega$ unbalanced			Optional Accessories		S-VIDEO cable (4P) ..... AG-C71 (5m) VW-CV2 (2m) VW-CV1 (1.5m)	
	Output level	LINE (BNC $\times$ 2); 1.0Vp-p, 75 $\Omega$ unbalanced S-VIDEO (4P $\times$ 2); Y: 1.0Vp-p, 75 $\Omega$ unbalanced C: 0.286Vp-p (burst), 75 $\Omega$ unbalanced COMPONENT OUT (BNC $\times$ 3): Y: 1.0Vp-p, 75 $\Omega$ unbalanced Pr: 0.486Vp-p, 75 $\Omega$ unbalanced Pb: 0.486Vp-p, 75 $\Omega$ unbalanced VIDEO MONITOR OUT (BNC): 1.0Vp-p 75 $\Omega$ unbalanced		Editing controller ..... AG-A350 AG-A800 AG-A770 AG-A750				
	Signal-to-Noise Ratio	VHS; 46dB (color)		Slow-motion controller ..... AG-A300 Remote search Controller ..... AG-A505 Remote Controller ..... AG-A600 Rack-mounting adapter ..... AG-M730E 34P Interface Board ..... AG-IA834 TBC Remote Controller ..... AU-ER65				
	Horizontal Resolution	S-VHS; more than 400 lines VHS; 240 lines						
Operating Condition	Temperature	5 $^{\circ}$ C - 40 $^{\circ}$ C (41 $^{\circ}$ F to 104 $^{\circ}$ F)						
	Humidity	35% - 80%						
Dimensions	16 - 11/16" (W) $\times$ 5 - 3/16" (H) $\times$ 16 - 5/16" (D) 424 mm(W) $\times$ 131.5 mm(H) $\times$ 415mm(D)							
Weight	Approx. 12kg (Approx. 26.4 lbs)							

Weight and dimensions shown are approximate.  
Specifications are subject to change without notice.



# INTRODUCTION

*This Service Manual contains all the technical information which will allow service personnel to understand and service the Panasonic S-VHS editing video cassette recorder model AG-DS 850P.*

*This model is video cassette recorder for editing applications which was developed for applications in industry, educational establishments, studios and CATV transmissions.*

*By the use of S-VHS system, a sharp picture quality with high resolution is obtained, and advanced editing by easy operation is realized by the introduction of highly dependable mechanisms.*

Panasonic

## CONTENTS

SPECIFICATIONS .....	1
SAFETY PRECAUTIONS .....	3
SECTION 6 MECHANISM .....	6-1
SECTION 7 ELECTRICAL ADJUSTMENTS .....	7-1
SECTION 8 BLOCK DIAGRAMS .....	8-1
SECTION 9 SUPPLEMENT .....	9-1



# SAFETY PRECAUTIONS

## GENERAL GUIDELINES

1. When servicing observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

## LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwhead connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between  $1\text{M}\Omega$  and  $5.2\text{M}\Omega$ .  
When the exposed metal does not have a return path to the chassis, the reading must be  $\infty$ .

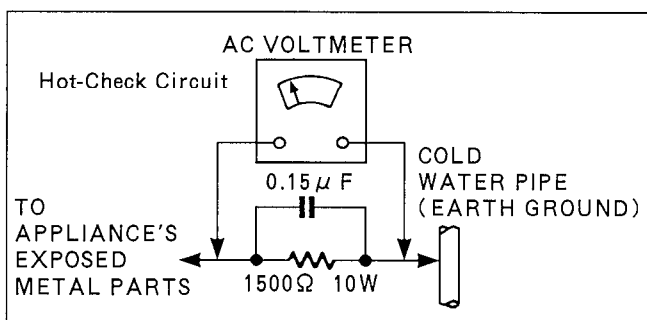


Figure 1

## LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.  
Do not use an isolation transformer for this check.
2. Connect a  $1.5\text{K}\Omega$ ,  $10\text{W}$  resistor, in parallel with  $0.15\ \mu\text{F}$  capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed  $1/2$  milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

## ELECTROSTATICALLY SENSITIVE(ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.  
Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.  
CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).



# SECTION 6

---

## MECHANISM

---



# CONTENTS

<b>6-1. Parts Location</b>	<b>6-3</b>
<b>6-2. Servicing Fixtures and Tools</b>	<b>6-4</b>
<b>6-3. How To Eject Manually</b>	<b>6-5</b>
<b>6-4. Maintenance Procedures</b>	<b>6-6</b>
6-4-1. Regular Maintenance	6-6
6-4-2. Maintenance Chart	6-6
6-4-3. Lubrication Procedures of the Capstan Shaft	6-7
6-4-4. Procedures for Cleaning of the Cylinder Unit	6-7
6-4-5. Adjustments After Re-installing the Upper Cylinder, Lower Cylinder	6-8
6-4-6. Adjustments After Re-installing the A/C Head Unit	6-8
<b>6-5. Mechanical Parts Replacement Procedures</b>	<b>6-9</b>
6-5-1. Replacement of the Upper Cylinder Unit	6-9
6-5-2. Replacement of the Lower Cylinder Unit	6-10
6-5-3. Replacement of the A/C Head (1) Unit	6-10
6-5-4. Replacement of the Full Erase Head	6-10
6-5-5. Replacement of the Capstan Rotor and Capstan Stator	6-10
6-5-6. Replacement of the Capstan Housing Unit	6-11
6-5-7. Replacement of the Inclined Base (S), (T)	6-12
6-5-8. Replacement of the P5 Post	6-12
6-5-9. Replacement of the Reel Unit	6-13
6-5-10. Replacement of the Main Brake (S), (T) Unit	6-13
6-5-11. Replacement of the Pressure Roller Unit	6-13
6-5-12. Replacement of the Mode Switch	6-14
6-5-13. Replacement of the Pinch Solenoid	6-14
6-5-14. Replacement of the Head Cleaning Pad	6-15
<b>6-6. Adjustment Procedures</b>	<b>6-16</b>
6-6-1. Floe Chart of Tape Interchangeability Adjustment	6-16
6-6-2. Coarse Adjustment of the Tape Guide Post Heights (P2 and P3)	6-17
6-6-3. Fine Adjustment of the Guide Post Height (P2 and P3) (Linearity)	6-18
6-6-4. Adjustment of the Pull-out Post (P5) Height	6-18
6-6-5. Adjustment of the A/C Head	6-19
6-6-6. Coarse Adjustment of the A/C Horizontal Position (X-Value)	6-21
6-6-7. Fine Adjustment of the A/C Horizontal Position (X-Value)	6-21
6-6-8. Adjustment of Inclined Base (T)	6-22
6-6-9. Adjustment of Thrust Gap	6-22
6-6-10. Adjustment of FG Gap	6-22
6-6-11. Measurement and Adjustment of Back Tension	6-23
6-6-12. Height Adjustment of the Reel Tables	6-23
6-6-13. Measurement and Adjustment of the Brake Torque	6-24
6-6-14. Pressing Force Confirmation of Pressure Roller Unit	6-25
6-6-15. Adjustment of Rev Tension Sensor Position	6-25
<b>6-7. Assembly and Adjustment of Mechanism</b>	<b>6-27</b>
6-7-1. Confirmation of Alignment Condition	6-27
6-7-2. Assembly Procedures of Sub Cam Gear, Ring Gear and Detent Arm	6-28
6-7-3. Assembly Procedures of Main Cam Gear and Pinch Speed Down Gear	6-28
6-7-4. Assembly Procedures of Loading Cam Gear and Retainer Gear	6-28
6-7-5. Assembly Procedures of Center Gear	6-29
6-7-6. Assembly Procedures of Main Lever and Cam Follower Arm Unit	6-29
6-7-7. Assembly Procedures of Loading Gear (T), Loading Gear (S) Sector Gear	6-29
6-7-8. Assembly Procedures of Connection Gear	6-30
6-7-9. Assembly Procedures of Mode Switch and P5 Pull Out Sector Gear	6-30
6-7-10. Assembly Procedures of Pinch Cam and Pressure Roller Unit	6-30
6-7-11. Assembly Procedures of Gear Base Unit	6-31
6-7-12. Re-installation of Cassette Compartment	6-31



## 6-1. PARTS LOCATION

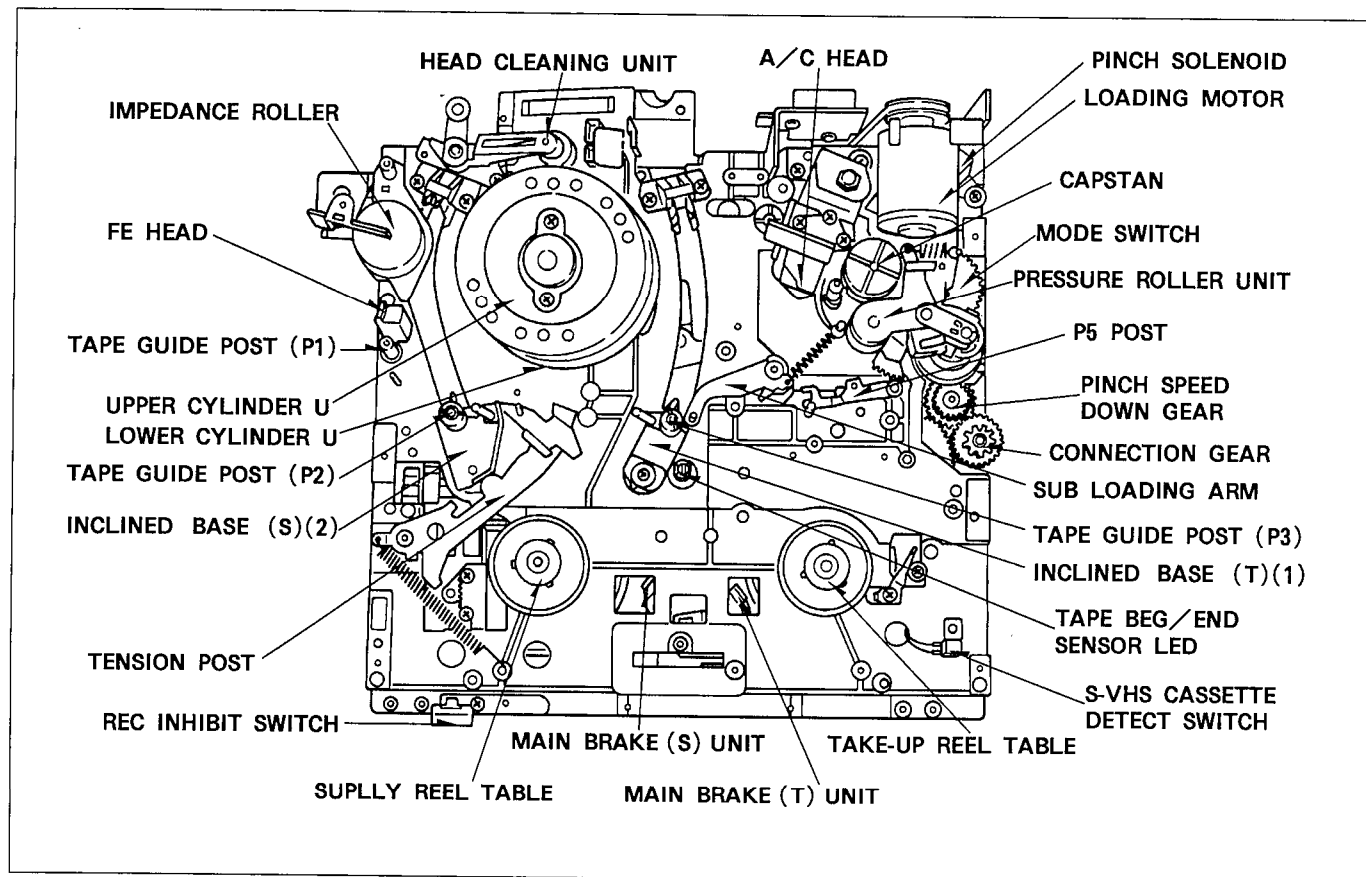


Figure M1

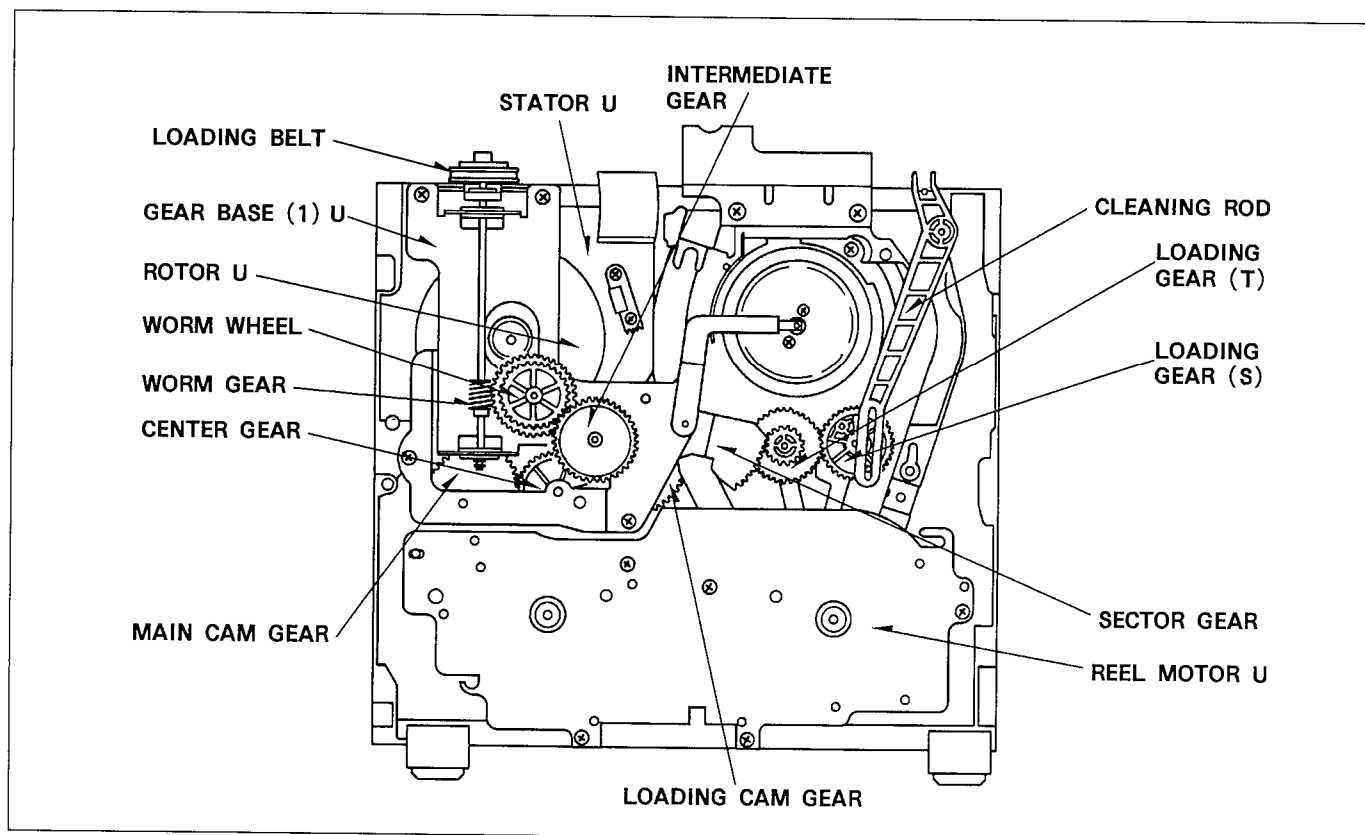


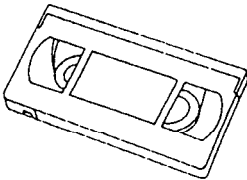
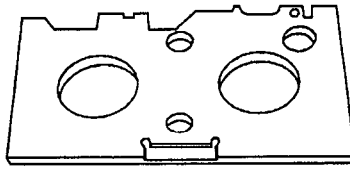
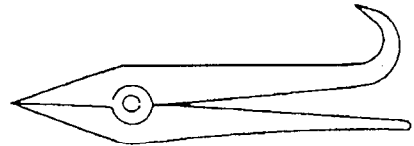
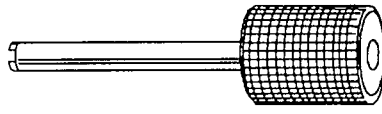
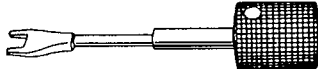
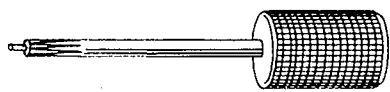
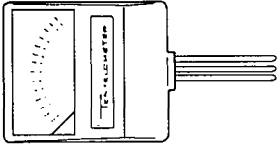
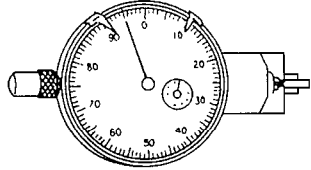
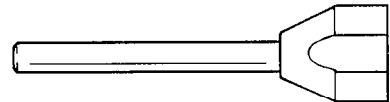
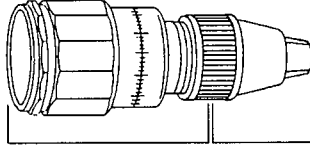
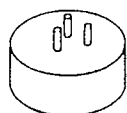
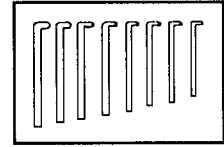
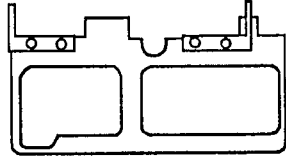
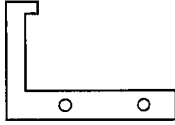


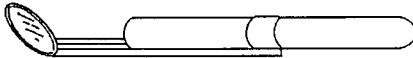
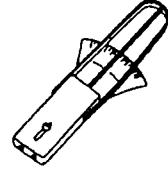
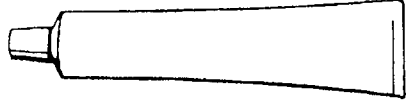
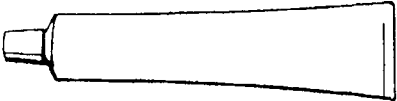
Figure M2



## 6-2. SERVICING FIXTURES AND TOOLS

The specified servicing fixture must be used to conduct adjustment.

The following fixtures, tools and measuring equipments are required to conduct complete Mechanical Adjustments.

<b>VFM8080HQFP ; VHS Alignment Tape</b> 	<b>VFK1012 ; Post Adjustment Plate</b> 	<b>VFK0335 ; Retaining Ring Remover</b> 
<b>VFK0329 ; Post Adj. Screwdriver</b> 	<b>VFK0328 ; H-Position Adj. Screwdriver</b> 	<b>VFK0330 ; Fine Adj. Screwdriver (3mm)</b> 
<b>VFK0132 ; Back Tension Meter (Tentelometer, Made in U.S.A)</b> 	<b>VFK0190 ; Reel Table Height Fixture</b> 	<b>VFK0950 ; Centering Fixture</b> 
<b>VFK0133 ; Dial Torque Gauge VFK0180 ; Plastic Clamper Only</b>  0133      0180	<b>VFK0134 ; Adaptor for VFK0133</b> 	<b>VFK0326 ; Hex. Wrench Set (0.7, 0.9, 1.2, 1.5, 1.6, 2, 2.4, 3 mm)</b> 
<b>VFK0236 ; Tension Post Adj. Plate</b> 	<b>VFK0806 ; Tension Sensor Adj. Fixture</b> 	<b>VFK27 ; Head Cleaning Stick</b> 
<b>VFK0269 ; L Type Screwdriver</b> 	<b>VFM0948 ; Check Light</b> 	<b>VFK66 ; Fan Type Tension Gauge</b> 
<b>VFK0680 ; S.C.R. Grease (White) (for plastic part)</b> 	<b>MOR265 ; Morlytone Grease (Black) (for metal part)</b> 	<b>VFK0906 ; High Quality Oil (for Capstan and P5 Post)</b>  <b>Cleaning Liquid (Alcohol) (Tape Transport Rubber Parts etc.)</b>  <b>&lt;&lt; PURCHASE LOCALLY &gt;&gt;</b>



## 6-3. HOW TO EJECT MANUALLY

If the electrical circuit is defective and the action of unloading and front unloading don't work properly, it is possible to eject manually as follows.

1. Take out the Main AC.
2. Release the direction as shown in Figure M3.
3. Release the Wormshaft to clockwise unit cassette is ejected.

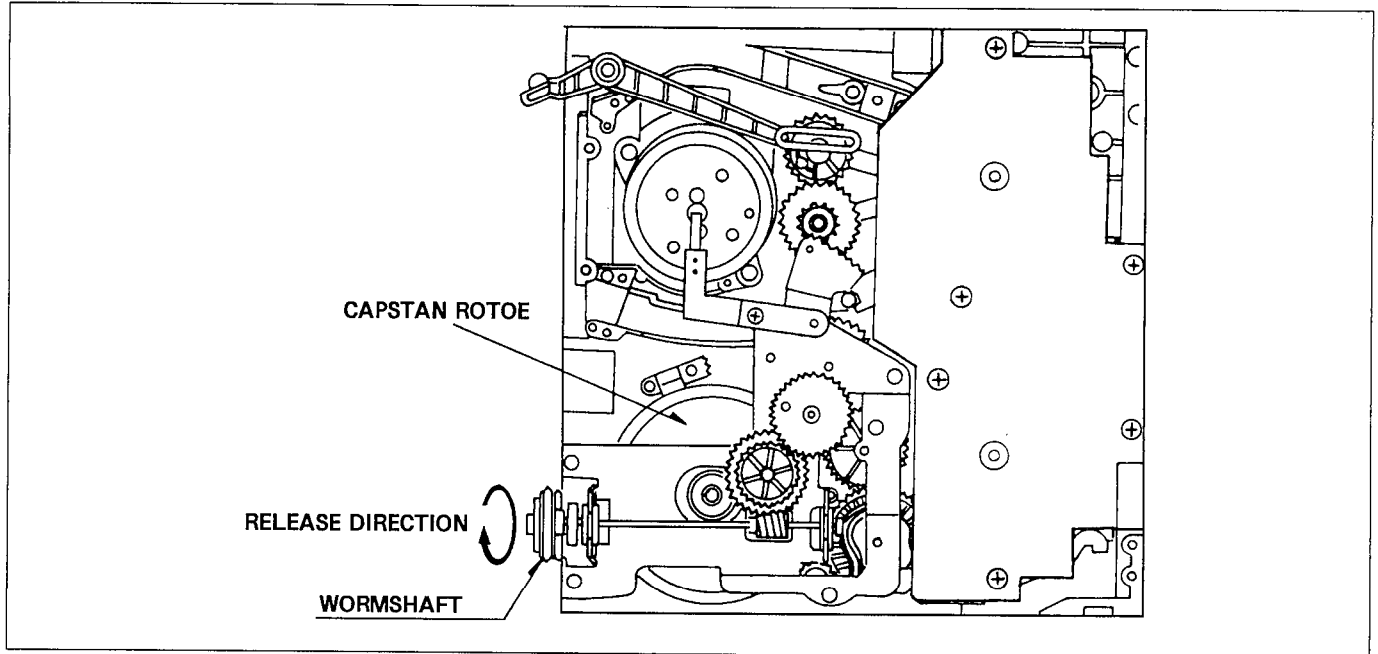


Figure M3 How to Eject Manually



## 6-4. MAINTENANCE PROCEDURES

### 6-4-1. REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout its useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

The VCR is a complicated piece of equipment. It contains many belts, rollers, heads etc., which become worn, and deteriorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after-sale repairs.

### 6-4-2. MAINTENANCE CHART

The following periodic maintenance is required to prolong the life of the machine.

Ref. No. IN P/L	Parts Name	Hour										Ref. No. IN P/L	Parts Name	Hour									
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000			500	1000	1500	2000	2500	3000	3500	4000	4500	5000
	Tape Transporter	●	●	●	●	●	●	●	●	●	●	2-1	Worm Shaft								▲		
1-7	Loading Motor U								◎			2-2	Loading Belt				◎				◎		
1-19	A/C Head U	●	●	●	●	●	●	●	◎	●	●	2-3	Worm Wheel								▲		
1-25	Pressure Roller U	●	●	●	◎	●	●	●	◎	●	●	2-8	Stator Base Unit								◎		
1-36	Mode Switch								◎			2-16	Main Brake (S)				◎				◎		
1-39	P5 Arm U								▲			2-18	Main Brake (T)				◎				◎		
1-41	Upper Cylinder	●	◎	●	◎	●	◎	●	◎	●	◎	2-23	Takeup Reel Table U								◎		
1-42	Lower Cylinder U	●	●	●	●	●	●	●	◎	●	●	2-24	Supply Reel Table U								◎		
1-45	Inclined (T) U								▲		◎	2-28	Capstan Rotor U	●	●	●	△	●	●	●	△	●	●
1-48	Inclined (S) U								▲		◎	2-33	Main Cam Gear								▲		
1-56	FE Head	●	●	●	●	●	●	●	◎	●	●	2-39	Loading Cam Gear								▲		
1-66	Head Cleaning U		◎		◎		◎		◎		◎												

#### \*NOTE :

Symbol	Maintenance	Requirement	Remark
●	Cleaning	Ethyl-alcohol or Cleaning Liquid (Purchase locally)	Wipe dirt from the parts using soft cloth impregnated with Ethyl-Alcohol. Note: When cleaning rubber parts, avoid using excessive alcohol since it may accelerate deterioration of these parts. After cleaning with alcohol, wipe the alcohol quickly and thoroughly.
◎	Replacement		
△	Lubrication	High Quality Spindle Oil (Purchase locally)	Supply one or two drops of oil.
▲	Greasing	Molytone Grease (MOR265)	Wipe the old grease and apply new grease.
×	Greasing	S.C.R. Grease (VFK0680)	Wipe the old grease and apply new grease.



### 6-4-3. LUBRICATION PROCEDURES OF THE CAPSTAN SHAFT

1. Remove the Pressure rollerUnit.
2. Remove the Thrust Screw.
3. Apply two drops of the oil (VFK0906) on the top of Capsutan Shaft as shown in Fig M6-A.

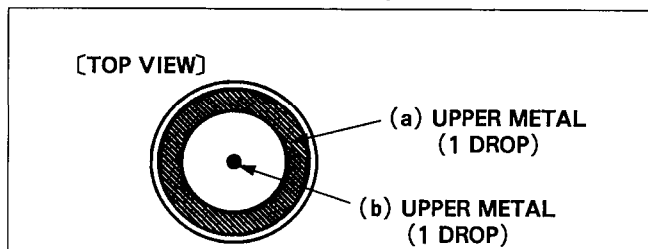
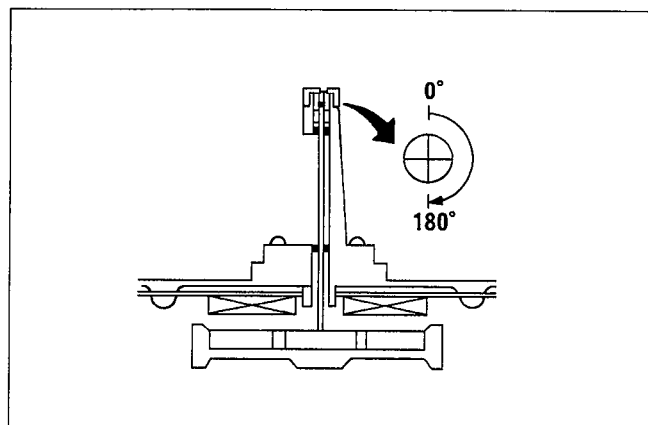


Figure M6-A

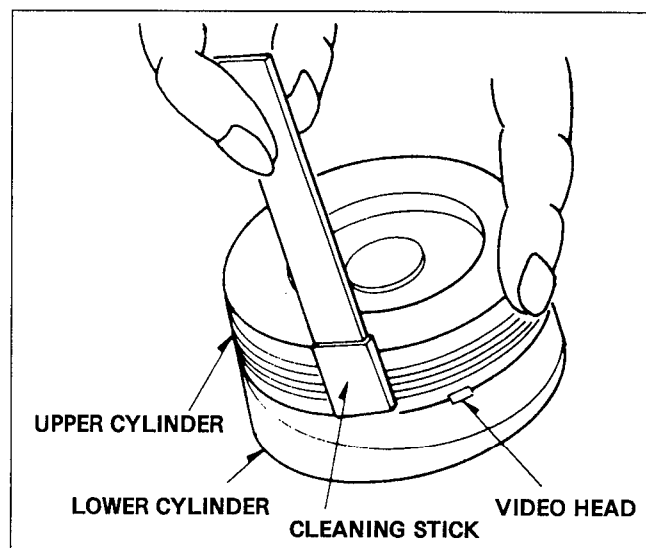
4. Turn the Thrust Adjustment Screw slowly to clockwise until the Capstan Rotor just starts turning ( separate from the Capstan Stator).
5. Turn the Thrust Adjustment Sscrew another 180° clockwise as shown in Figure M6-B.
6. Install the Pressure Roller Unit.
7. Wipe the extra oil.



FiguerM6-B

### 6-4-4. PROCEDURES FOR CLEANING OF THE CYLINDER UNIT

1. Position the Video Head to permit access for cleaning and hold the upper cylinder to keep it from turning while cleaning.
  2. Gently rub the Video Head in direction of tape travel with Head Cleaning Stick moistened with Cleaning.
  3. Repeat for the other video heads (FigureM7).
- Note: 1.Do not rub vertically.  
2.Do not apply any pressure to heads.



FigureM7



## 6-4-5. ADJUSTMENTS AFTER RE-INSTALLING THE UPPER CYLINDER, LOWER CYLINDER

AFTER RE-INSTALLING THE UPPER CYLINDER OR LOWER CYLINDER

6-6-3. FINE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHT (P2 AND P3) LINEARITY

7-3-2. TRACKING FIX ADJUSTMENT

6-6-6. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

6-6-7. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

7-3-1. PG SHIFTER ADJUSTMENT

7-4-5. CHROMA REC CORRENT ADJUSTMENT

7-4-6. S-VHS Y REC CURRENT ADJUSTMENT

7-4-7. VHS Y REC CURRENT ADJUSTMENT

7-5-1. PB RF CHROMA LEVEL ADJUSTMENT

7-5-2. PB Y LEVEL ADJUSTMENT

7-5-3. S-VHS NORMAL EQUALIZER ADJUSTMENT

7-5-4. S-VHS SS EQUALIZER ADJUSTMENT

7-5-5. VHS EQUALIZER ADJUSTMENT

7-5-6. VIDEO TRACKING METER ADJUSTMENT

7-7-11. Hi-Fi AUDIO HEAD SWITCHING SHIFTER ADJUSTMENT

7-5-15. Hi-Fi AUDIO REC CURRENT ADJUSTMENT

7-8-3. FLYING ERASE CORRENT ADJUSTMENT

## 6-4-6. ADJUSTMENTS AFTER RE-INSTALLING THE A/C HEAD UNIT

AFTER RE-INSTALLING THE A/C HEAD UNIT

### MECHANICAL ADJUSTMENT

6-6-5. ADJUSTMENT OF A/C HEAD

- A. COARSE ADJUSTMENT OF THE A/C HEAD HEIGHT
- B. COARSE ADJUSTMENT OF THE A/C HEAD TILT
- C. ADJUSTMENT OF THE A/C HEAD AZIMUTH
- D. ADJUSTMENT OF THE A/C HEAD TILT & AZIMUTH
- E. ADJUSTMENT OF LOOK SCREW
- F. FINE ADJUSTMENT OF THE A/C HEAD HEIGHT

6-6-3. FINE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHT (P2 AND P3) LINEARITY

6-6-6. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

6-6-7. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

7-7-5. NORMAL AUDIO PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

7-7-6. NORMAL AUDIO PB GAIN ADJUSTMENT

7-7-7. NORMAL AUDIO ERASE CURRENT ADJUSTMENT

7-7-8. NORMAL AUDIO BIAS CURRENT ADJUSTMENT

7-7-14. NORMAL AUDIO REC CURRENT ADJUSTMENT



## 6-5. MECHANICAL PARTS REPLACEMENT PROCEDURES

### 6-5-1. REPLACEMENT OF THE UPPER CYLINDER UNIT

1. First remove two screws as shown in Figure M10-A. Then unsolder of the soldered portions indicated by arrows on the Upper Cylinder, and finally remove the Upper Cylinder.

Note: Soldered portion can be easily removed by using solder sucking wire, etc.

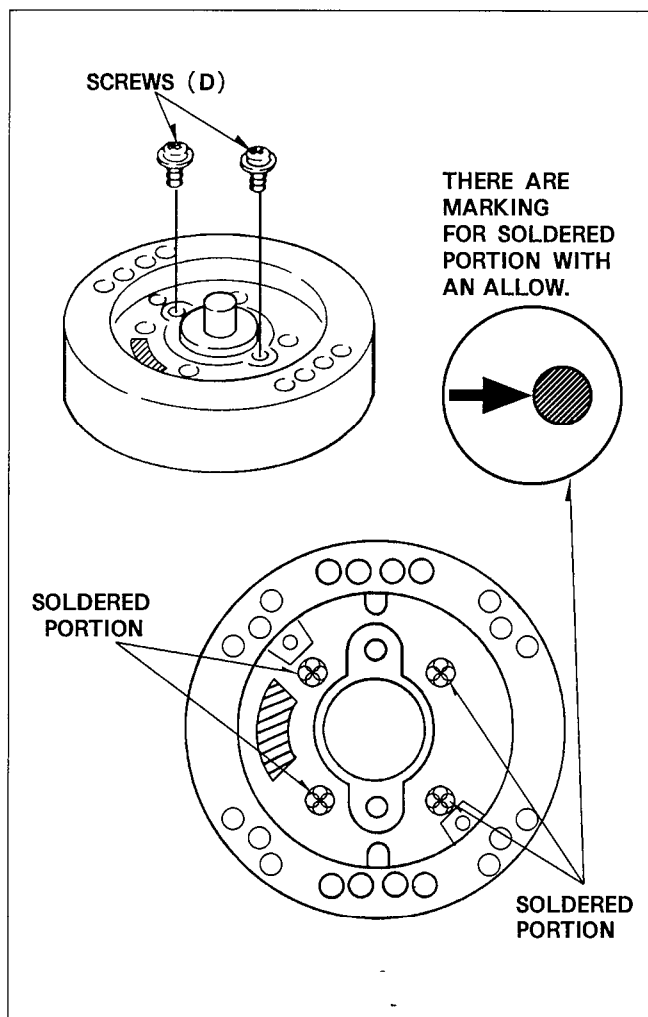


Figure M10-A

2. The Upper Cylinder unit can be reinstalled by reversing the removal procedure. However, when Upper Cylinder is installed, be extremely carefully so that white portion of P.C.Board of Upper Cylinder correctly matches the white portion of bottom cylinder as shown in Figure M10-A.

Note: If the Upper Cylinder Unit is reversal installed, no color will appear when playing back pre-recorded tapes.

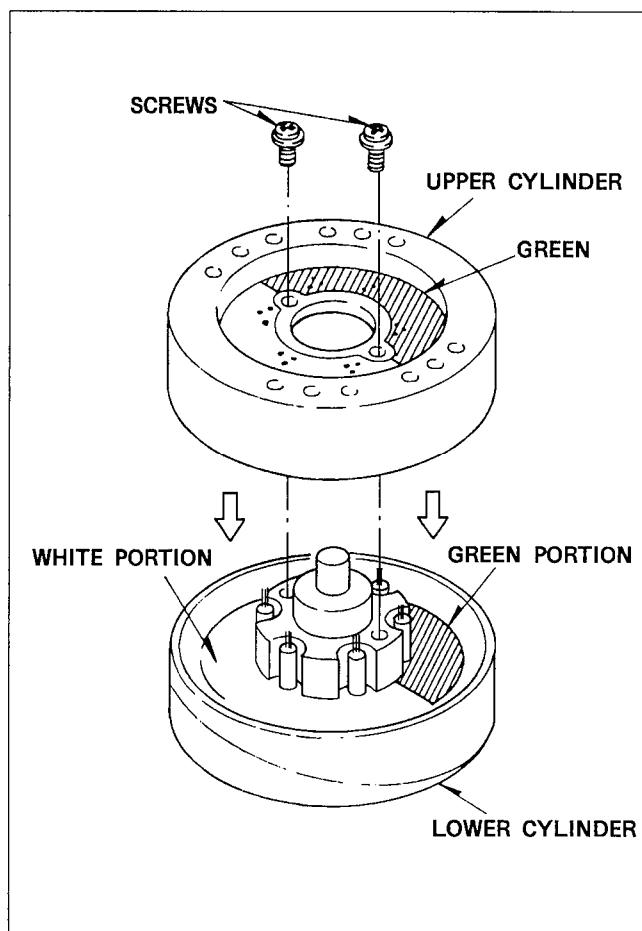


Figure M10-B



## 6-5-2. REPLACEMENT OF THE LOWER CYLINDER UNIT

1. Unscrew the 2 screws and remove the Head Amp.
2. Remove the Cleaning rod from bottom side.
3. Unscrew 3 screws (A). Since there is very little clearance between DD Cylinder (Lower Cylinder) Unit and Chassis, remove the Cylinder gently and carefully (Figure M11).

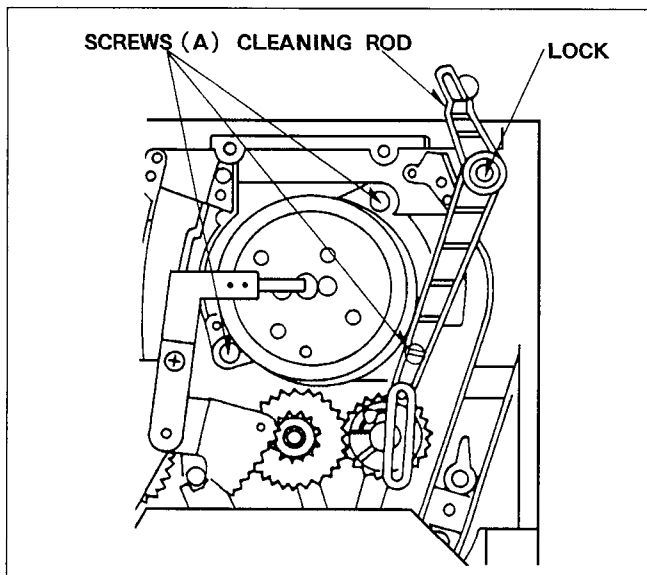


Figure M11

4. Reinstall the new DD Cylinder (Lower Cylinder) Unit in the chassis, tighten the 3 screws (A). Then connect a connectors and reinstall the Cleaning Rod.
5. Re-install the Head Amp C.B.A.

Note: After reinstall the Upper Cylinder Unit should be perform Mechanical and Electrical adjustment (Refer to 3-4-5. Maintenance Procedures).

## 6-5-3. REPLACEMENT OF THE A/C HEAD (1) UNIT

1. Disconnect a connector (H)(Figure M12).

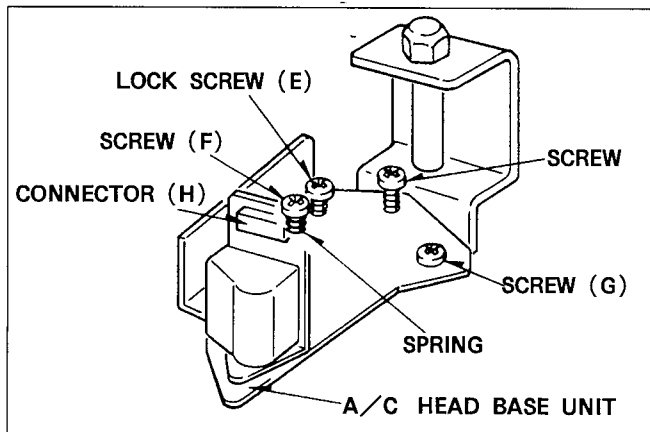


Figure M12

2. Unscrew 3 (B)(C)(D) screws with spring and then remove the A/C Head Unit (Figure M12).
3. The A/C Head (1) Unit can be reinstalled by reversing the removal procedure.

Note: After reinstall the Upper Cylinder Unit should be perform Mechanical and Electrical adjustment (Refer to 6-4-6. Maintenance Procedures).

## 6-5-4. REPLACEMENT OF THE FULL ERASE HEAD

1. Disconnect a connector (J) and unscrew a screw (E) and remove the Full Erase Head (Figure M13).

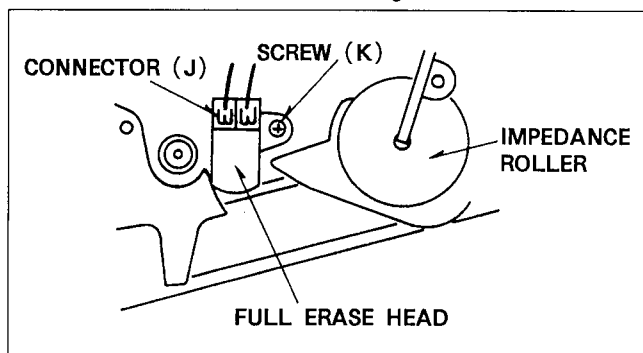


Figure M13

3. The new Full Erase Head can be reinstalled by reversing the removal procedure.

## 6-5-5. REPLACEMENT OF THE CAPSTAN ROTOR & STATOR

When replacing the Capstan stator unit the Center Fixing Tool must be used to fix the center of Capstan Stator Unit.

1. Remove the loading belt.
2. Unscrew the 4 (F) screws and remove Gear base Unit.
3. Carefully lift up the capstan rotor from the capstan housing, taking care so as not loose the 2 oil seals as shown in Figure M14-A.

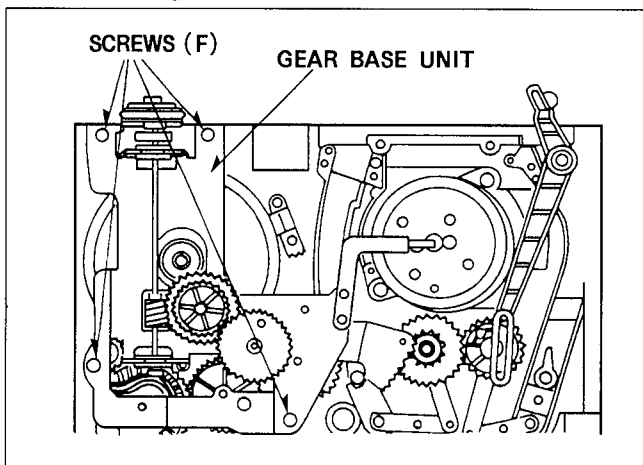


Figure M14-A



4. Remove the 2 oil seals.
5. Unscrew the 3 (G) screws and remove Capstan Stator.
6. Place the capstan stator unit into position.
7. Loosely tighten the 3 (G) screws.
8. Insert the Center Fixing Tool as shown in Figure M14-B.

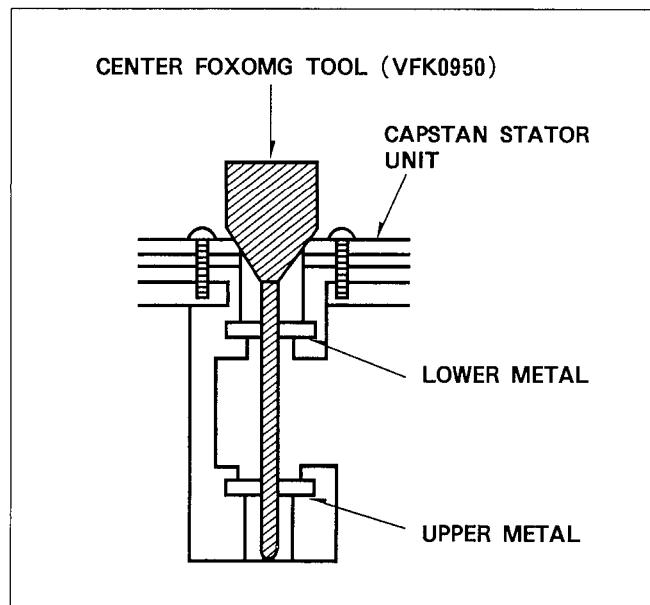


Figure M14-B

9. Tighten the 3 screws (G).
10. Remove the center fixing tool.
11. The new capstan rotor unit can be reinstalled by reversing the removal procedure.

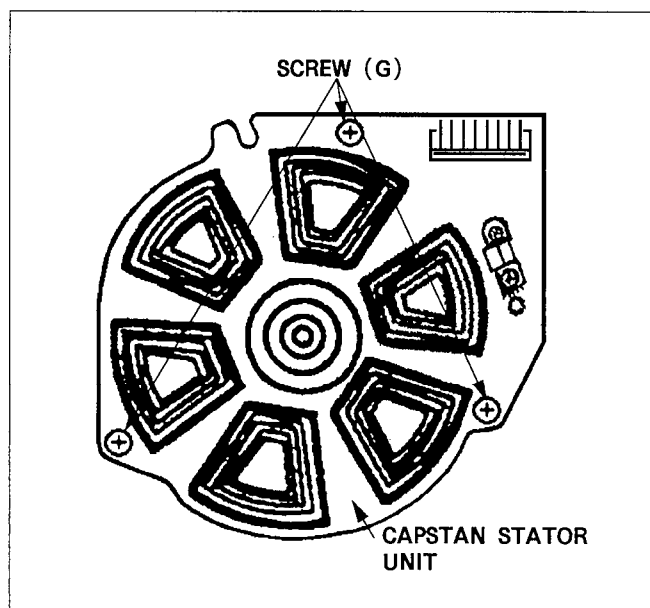


Figure M14-C

## 6-5-6. REPLACEMENT OF THE CAPSTAN HOUSING UNIT

1. Remove the pressure Roller Unit.
2. Remove the Sub post spring from the hook of Capstan Housing.
3. Unscrew the 3 screws (H) and remove Capstan Housing.
4. Remove the 2 oil seals and thrust screw.
5. Replace the new Capstan Housing, 2 oil seals and thrust screw at same time.
6. Re-install the Capstan Housing Unit by reversing the remove procedure.

Note: After re-installing the thrust screw adjustment of the thrust screw are required. Replace the new Capstan Rotor, 2 oil seals and thrust screw at same time. After re-installing the capstan rotor or capstan stator confirmation of FG out put level and adjustment of FG head gap are required.

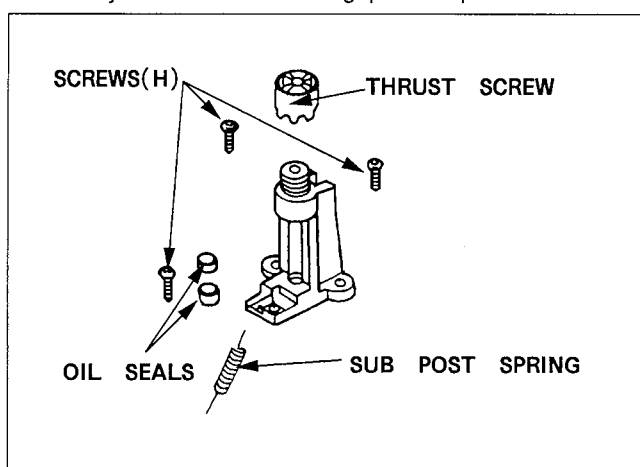


Figure M15



## 6-5-7. REPLACEMENT OF THE INCLINED BASE (S),(T)

### 《SUPPLY SIDE》

1. Unscrew a screw (I) and remove the head cleaning plate unit as shown in Figure M16-A.
2. Unscrew the 2 screws (J) and remove the post stopper.

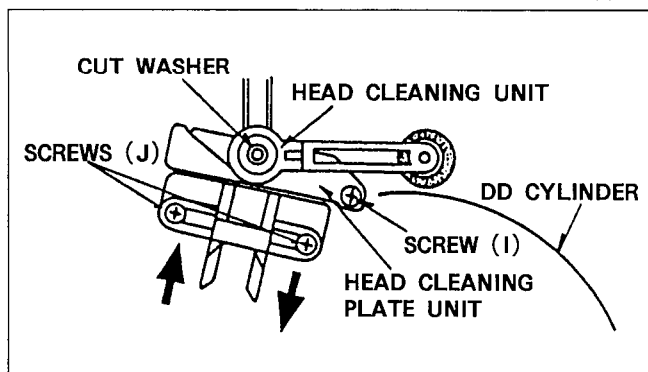


Figure M16-A

3. Remove the P2 post unit from loading arm (S) as shown in Figure M16-B.

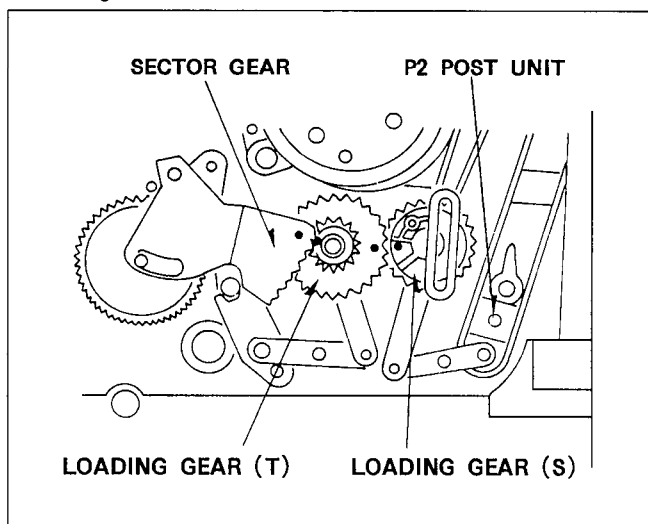


Figure M16-B

4. Pull out the Inclined base (S) from loading base.
5. The new inclined base unit can be reinstalled by reversing the removal procedure.

Note: Install post stopper pushing the arrow direction (A), (B) as shown in Figure M16-A. After re-installing the inclined base (S) confirmation of tape interchangeability and P2, P3 posts adjustments are required.

### 《TAKE-UP SIDE》

1. Unscrew a screw (K) and remove the inclined base (T) as show in Figure M16-C.
2. Install the inclined base (T) so that the tip of inclined base is center on the Plate Hole and then tighten screw (K).

Note: After re-installing the inclined base (T) confirmation of tape interchangeability and inclined base adjustment are required.

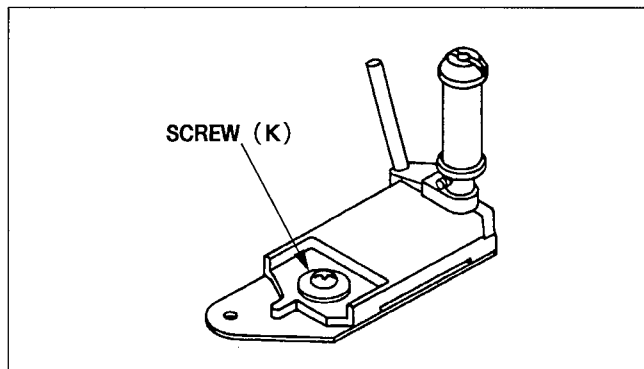


Figure M16-C

## 6-5-8. REPLACEMENT OF THE P5 POST

1. Remove the top cover and cassette holder.
2. Rotate the loading motor to clockwise, until the stop mode.
3. Remove the pressure roller unit.
4. Remove the pinch cam (Ref. to Replacement of the mode switch) and P5 pull out sector gear as shown in Figure M17.

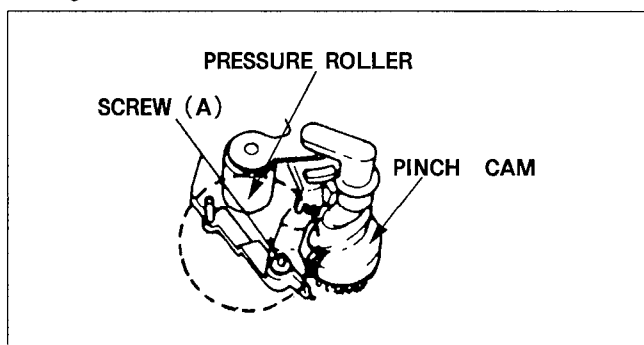


Figure M17

5. Unscrew a Nut (A) and Remove the P5 Post.
6. The new P5 post can be reinstalled by reversing the removal procedure.

Note: After-reinstalling the P5 post confirmation of tape waving and P5 post height adjustment are required.



### 6-5-9. REPLACEMENT OF THE REELUNIT

1. Remove 6 screws (L) and carefully lift the DD Reel Unit.
2. Disconnect a connector.

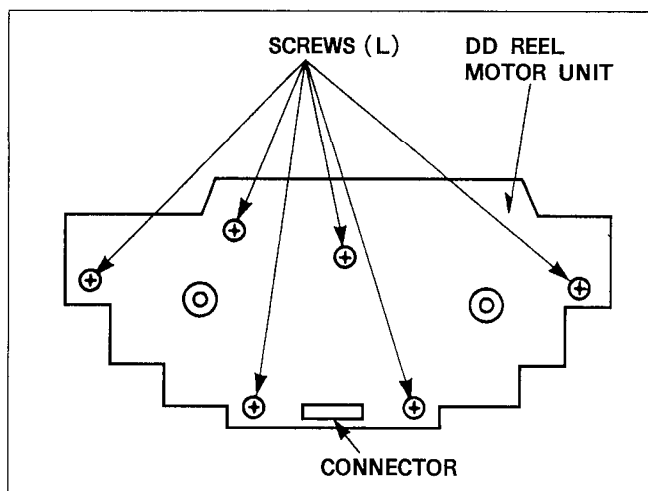


Figure M18-A

3. The Reel Motor Unit can be re-installed by reversing the removal procedure.

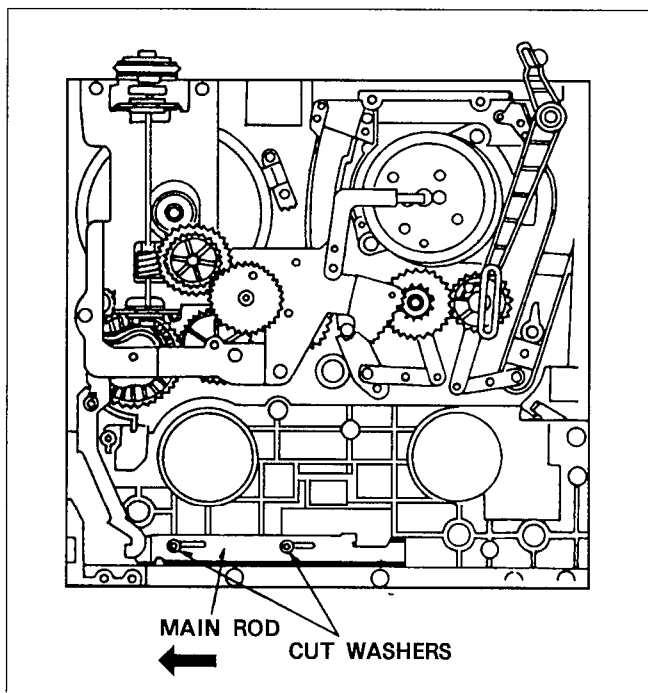


Figure M18-B

Note: When assembling the DD Reel Motor Unit, side the Main Rod to far left side by rotating a center Gear.

### 6-5-10. REPLACEMENT OF THE MAIN BRAKE (S),(T) UNIT

1. Remove the Reel Unit (Refer to Replacement of the Reel Unit).
2. Remove a Retaining Ring (A).
3. Remove the Main Brake (S),(T) with a spring.

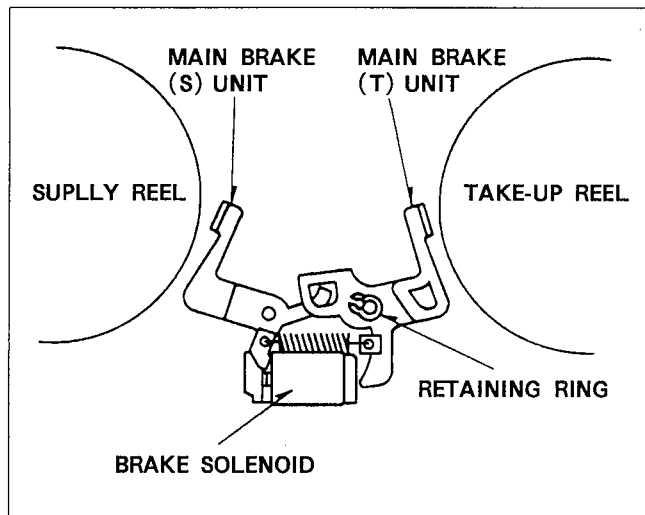


Figure M19

4. The new Main Brake (S),(T) Unit can be reinstalled by reversing the removal procedure.

Note: When assembling the DD Reel Motor Unit, slide the Main Rod to far left side by rotating a Center Gear (Figure M19).

### 6-5-11. REPLACEMENT OF THE PRESSURE ROLLER UNIT

1. Place the deck in or EJECT mode.
2. Remove the Pinch Can Cap.
3. Remove the Pressure Roller Unit.

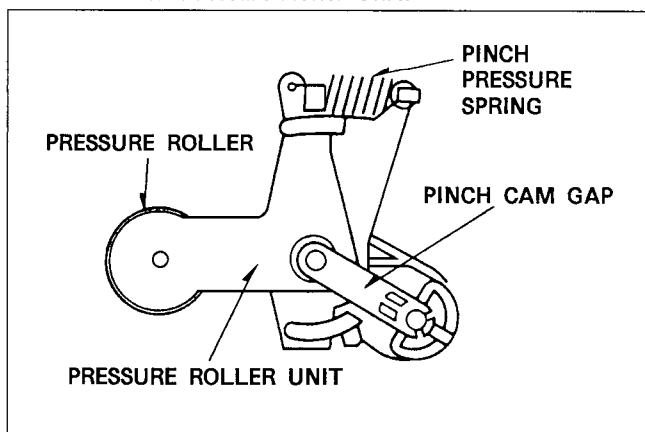


Figure M20

4. The new Pressure Roller Unit can be re-installed by reversing the removal procedure.



## 6-5-12. REPLACEMENT OF THE MODE SWITCH

1. Place the deck in the STOP mode.
2. Remove the Cassette Compartment Unit. (Refer to Disassembly Procedures).
3. Remove the Pinch Cam Cap and Pressure Roller Unit.
4. Unscrew the 2 screws and remove the Head Amp.
5. Remove the Pinch Cam.
6. Unscrew 2 screws (M) and remove the Loading Motor Base.
7. Unscrew a screw (N) and unsolder 5 of soldered portions.
8. Finally remove the Mode Switch.

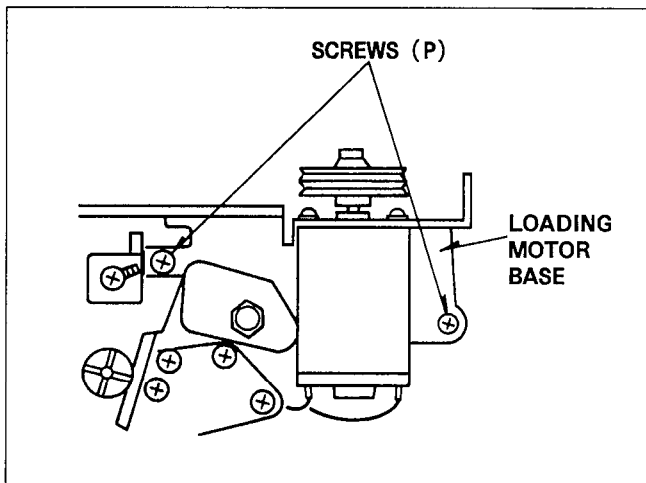


Figure M21-A

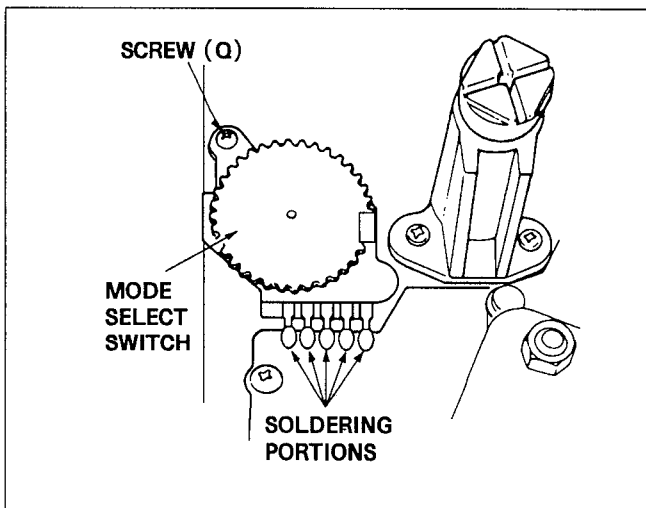


Figure M21-B

9. Install a Mode Switch and tighten screw (N), then solder 5 soldering portions.
10. Install the Pinch Cam and Pressure Roller Unit. (Refer to "Assembly Procedures of Pinch Cam & Pressure Roller Unit.")
11. Install the Loading Motor Base and tighten screw (M).
12. Install the Head Amp and tighten 2 screws.
13. Install the Cassette Compartment. (Refer to Reinstallation of Cassette Compartment.)

## 6-5-13. REPLACEMENT OF THE PINCH SOLENOID

1. Unscrew 2 screws (M) and remove the Loading Motor Base (Figure M21-A).
2. Unscrew 2 screws (O), Remove the Motor Pulley and Loading Motor (Figure M22-A).
3. Disconnect a connector (red) on the Motor Base C.B.A.
4. Unscrew 2 screws (P)(Figure M22-B) and remove the Pinch Solenoid.
5. Install the Pinch Solenoid on to the Motor Base so that the hole of the Motor Base should be the large hole of the Solenoid Base (Figure M22-C).
6. Tighten 2 screws (P).
7. Install a Loading Motor and tighten 2 screws (O).
8. Install the Loading Motor Base and tighten 2 screws (M)(Figure M21-A).

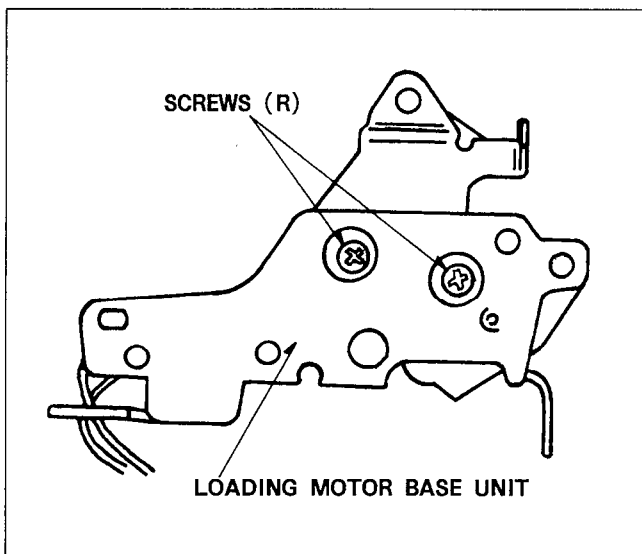


Figure M22-A

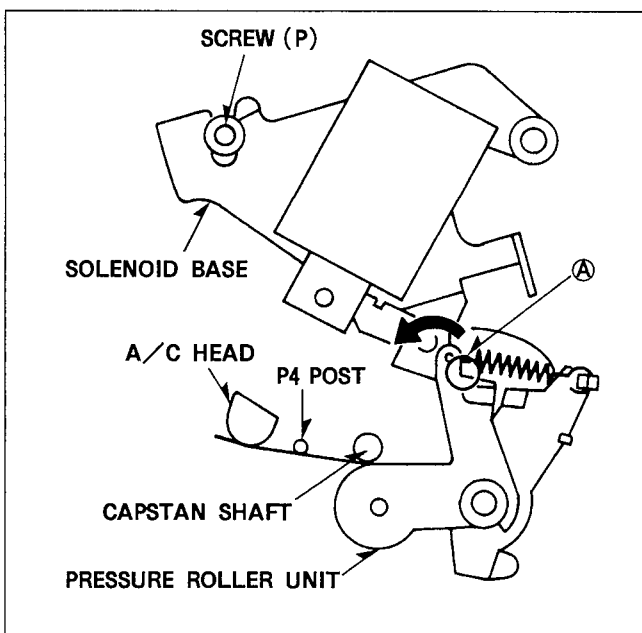


Figure M22-B



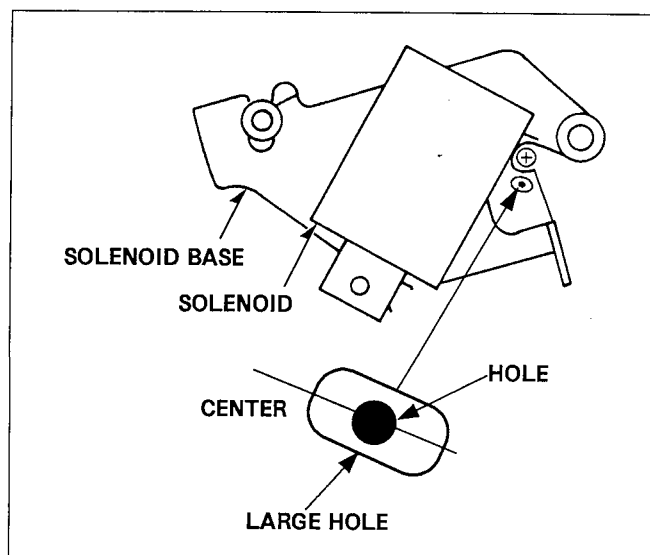


Figure M22-C

Note: Pressure Adjustment of the Pinch Roller (Refer to Mechanical Adjustment procedures) should be performed after completion of reinstalling the Pinch Solenoid.

#### 6-5-14. REPLACEMENT OF THE HEAD CLEANING PAD

1. Remove a Cut Washer (N) and the Head Cleaning Pad Unit.
2. The Head Cleaning Pad Unit can be reinstalled by reversing the removal procedure.

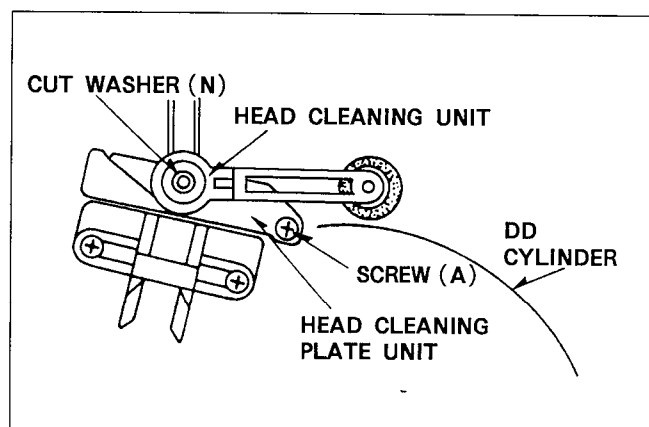
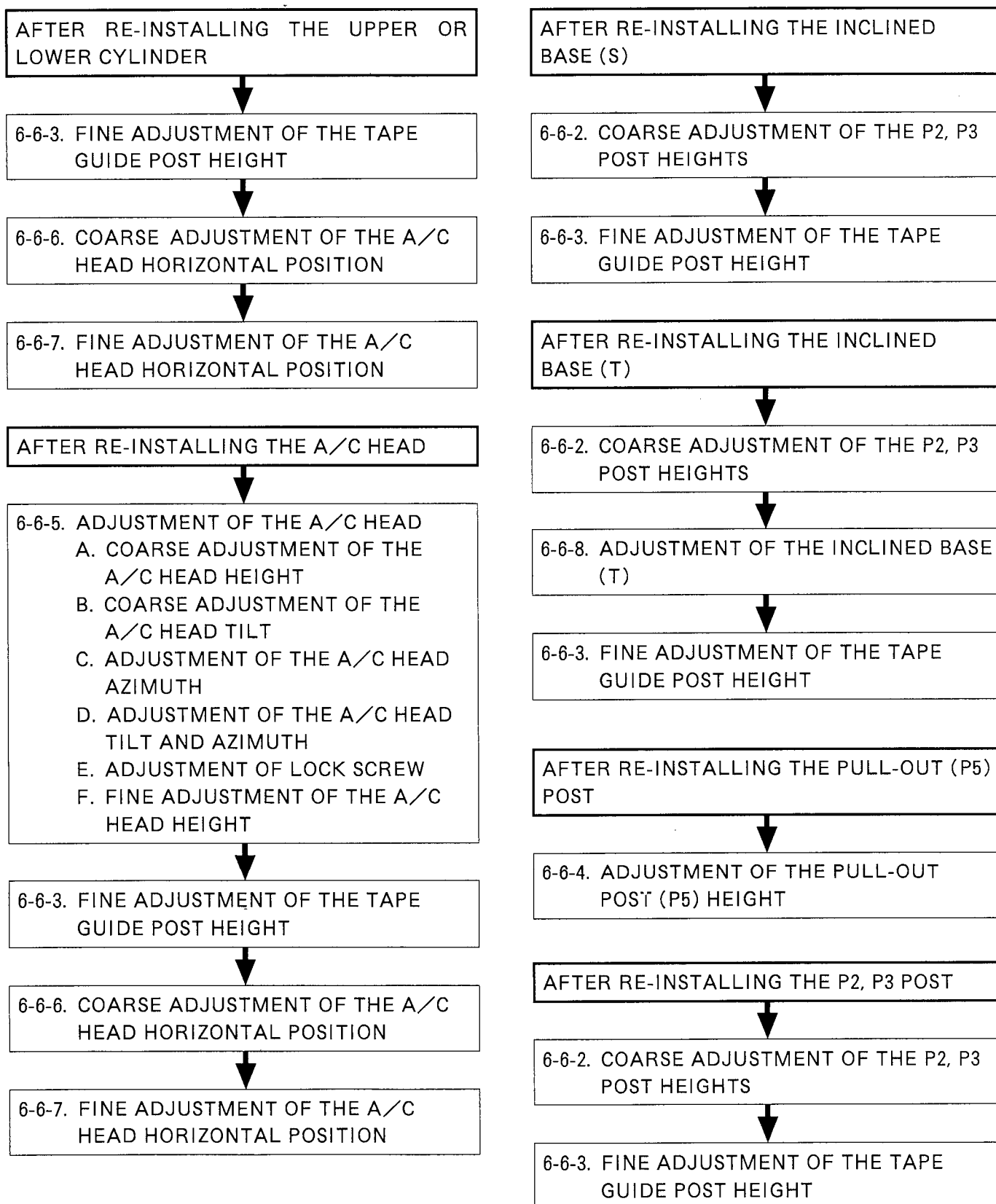


Figure M23



## 6-6. MECHANICAL ADJUSTMENT PROCEDURES

### 6-6-1. FLOW CHART OF TAPE INTERCHANGEABILITY ADJUSTMENT





## 6-6-2. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS (P2 and P3)

Note: The Tape Guide Posts have been precisely adjusted at the factory. Therefore, normally do not change the height of the P2 and P3 Posts.

To prevent the alignment tape from being damaged, use a normal cassette tape for this procedure.

### << TOOL >>

Post Adjustment Plate .....VFK1012  
Reel Table Height Gauge .....VFK0190  
Post Adjustment Screwdriver .....VFK0329  
Check Light .....VFK0948  
L Type Screwdriver .....VFK0269

1. Remove the cassette compartment (Refer to Disassembly Procedures).
2. Place the Post Adjustment Plate over the reel tables. Confirm that the Post Adjustment Plate is firmly seated as shown in Figure M25-A.

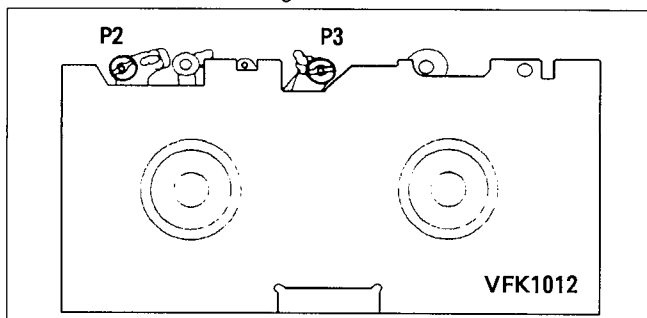


Figure M25-A

3. Lower 2 tape guide posts (P2 and P3) by turning the Post Adjustment screwdriver so that the condition of post becomes as shown in Figure M25-B. That is the lower edge of Tape guide should be lower than surface of AdjustmentPlate.

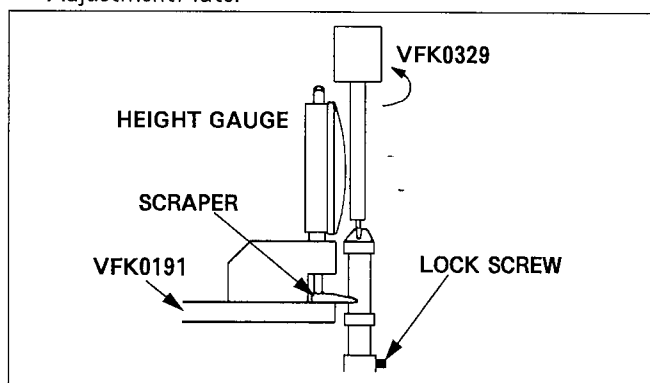


Figure M25-B

Note: Before turning P2 and P3 slightly loosen the Lock Screw using the L Type Screwdriver.

4. Place the scraper of Reel Table height Gauge as shown in Figure M25-C.  
Set the gauge to zero, then raise the post slowly until the

lower tape guide just touches the bottom of the scraper. Use the gauge to determine the exact point at which the lower tape guide touches the scraper.

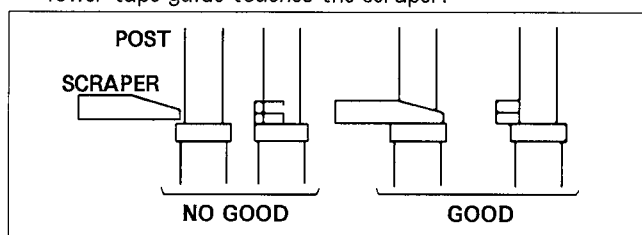


Figure M25-C

5. After the adjustment, install the cassette compartment referring to Reinstallation of cassette compartment.
6. Play back the beginning portion of NV-T160 cassette tape, and confirm that tape travel as shown in Figure M25-D.

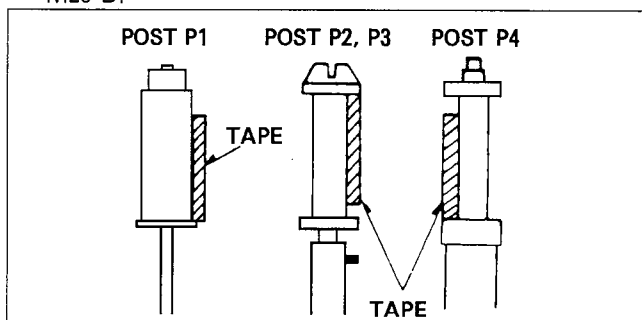


Figure M25-D

7. Make sure that the edges of the tape are not curling or waving at the bottom or top end of the posts P2, P3 by using the Check Light.
8. If there are waving or filling at the lower or upper edge of the P2 and P3 posts, readjust the heights of P2 and P3 Posts correctly as shown in Figure M25-E.

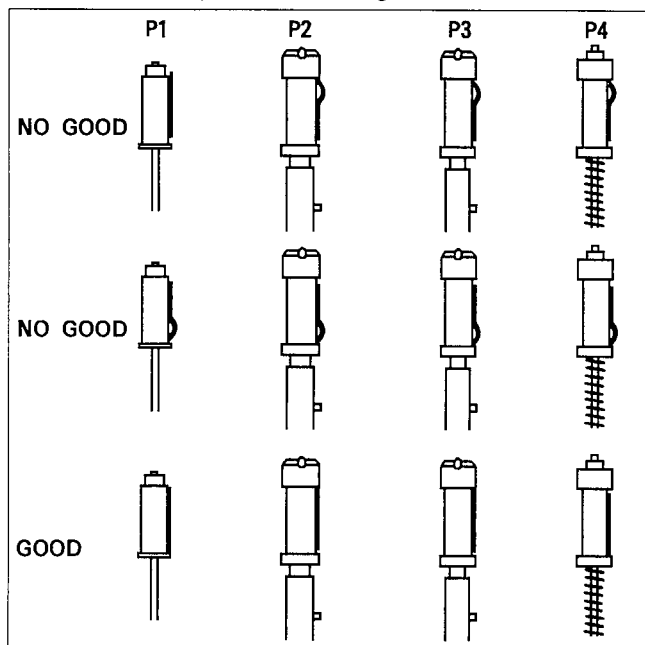


Figure M25-E

9. And confirm that the tape runs along the Cylinder Lead Correctly.



### 6-6-3. FINE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHT (P2 and P3)(LINEARITY)

#### << TOOL >>

Alignment Tape VFM8080HQFP

Post Adjustment Screwdriver .....VFK0329

Note: Before playing back the alignment tape playback a normal cassette tape and confirm correct transport.

1. Connect the oscilloscope to the TP2 of the Video I/O C.B.A. (Video RF Envelope and the head switching pulse as a triggering signal).
2. Play back the 2-nd portion (Monoscope 2) of the alignment tape (VFM8080HQFP).
3. Adjust the tracking control on the front panel so that the RF envelope becomes maximum.
4. If the RF envelope appears like example A or B in Figure M26-B then adjustment of the tape guide post (P2 ; Entrance) is necessary.

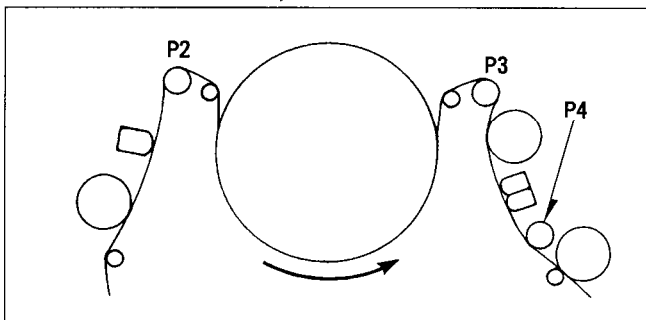


Figure M26-A

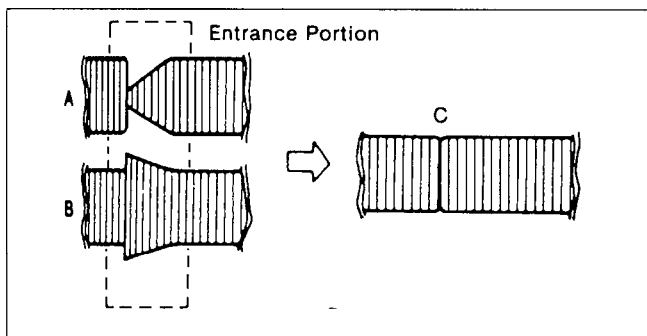


Figure M26-B

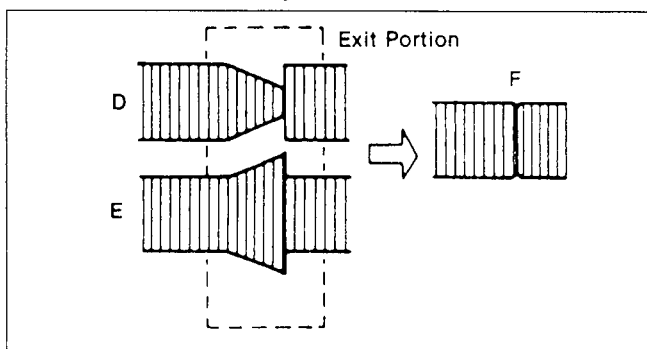


Figure M26-C

5. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Figure M26-B.
6. If the RF envelope appears like example D or E in Figure M26-C, then adjustment of the tape guide post (P3 ; Exit) is necessary.
7. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in Figure M26-C.
8. The output envelope should vary nearly parallel with other condition as shown in Figure M26-D.

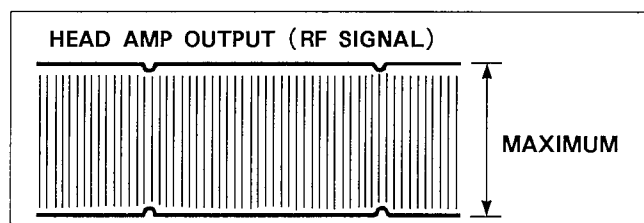


Figure M26-D

9. If the RF envelope does not meet these specification,

$$V1/V0 \geq 0.7$$

$$V2/V0 \geq 0.8$$

$$V3/V0 \geq 0.7$$

then repeat steps 4-9 again.

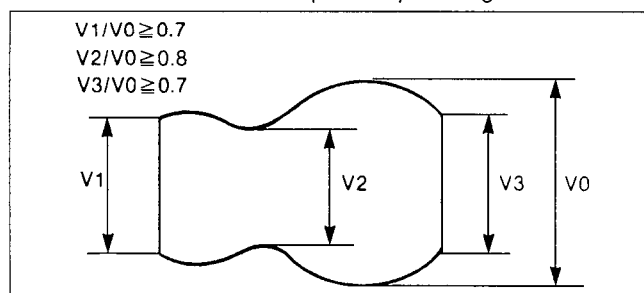


Figure M26-F

### 6-6-4. ADJUSTMENT OF THE PULL-OUTPOST (P5) HEIGHT

#### << TOOL >>

Post Adjustment Plate .....VFK1012

Reel Table Height Gauge .....VFK0190

Nut Driver .....Purchase locally

#### << SPEC >>

0.03mm 0.01mm

Note: Unless the replacement or adjustment this post is required, the adjustment nut should not be turned.

1. Remove the cassette compartment (Refer to Disassembly procedures).
2. Place the Post Adjustment Plate over the reel tables as shown in Figure M27-A.
3. Turn the Worm Shaft counterclockwise (loading direction) until the mechanical condition becomes as shown in Figure M27-A.
4. Place the Reel Table Height Gauge on the Post Adjustment Plate and set the gauge to zero 0 as shown in Figure M27-B.



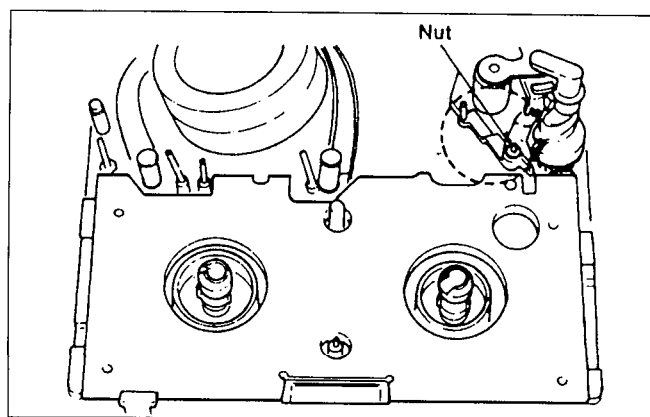


Figure M27-A

5. Place the Reel Table Height Gauge as shown in Figure M27-C and turn the nut slowly until the gauge reads.

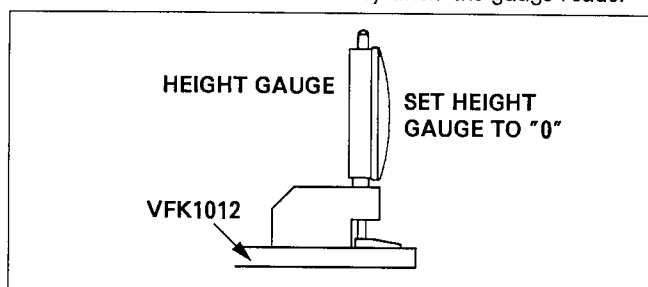


Figure M27-B

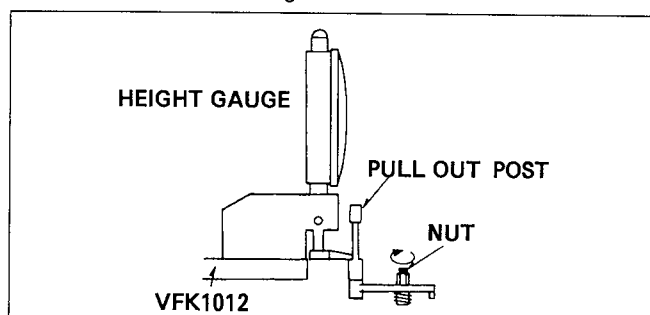


Figure M27-C

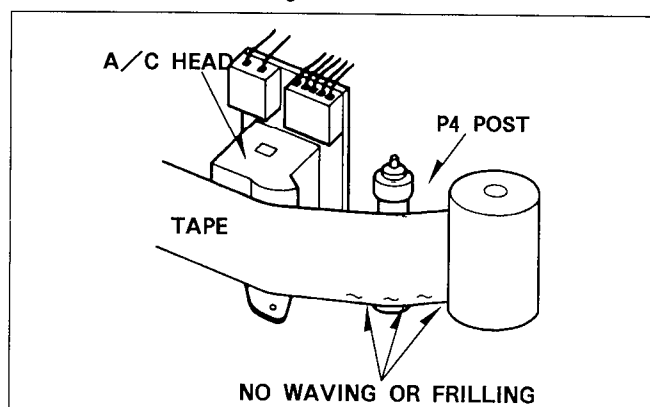


Figure M27-D

6. After the adjustment, install the cassette compartment (Refer to reinstallation of Cassette Compartment).
7. Play back a normal cassette tape on Review search mode, and make sure that the edges of the tape are not curling or waving at the bottom end of the P4 post by using the Check Light as shown in Figure M27-E.

Note: There is easy method to check Waving of Filling. If there is Waving or Filling in the lower edge, the white black pattern which is reflected on the tape will curve or not linear as shown in Figure M27-E.

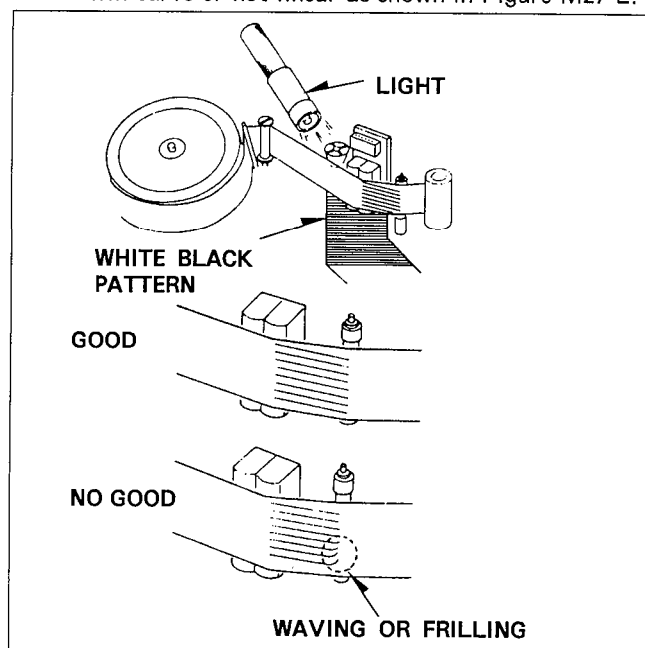


Figure M-27-E

## 6-6-5. ADJUSTMENT OF THE A/C HEAD

### A. COARSE ADJUSTMENT OF THE A/C HEAD HEIGHT

Note: This procedure should be performed only when the A/C Head is replaced.

#### << TOOL >>

Check Light .....VFK0948  
Nut Driver .....Purchase locally  
VHS video Tape

1. With the tape running, look at the lower edge of the control head by using the check light.
2. Adjust the Nut (A) as shown in Figure M28-A by turning the Nut (A) clockwise to lower the head, and counterclockwise to raise it.

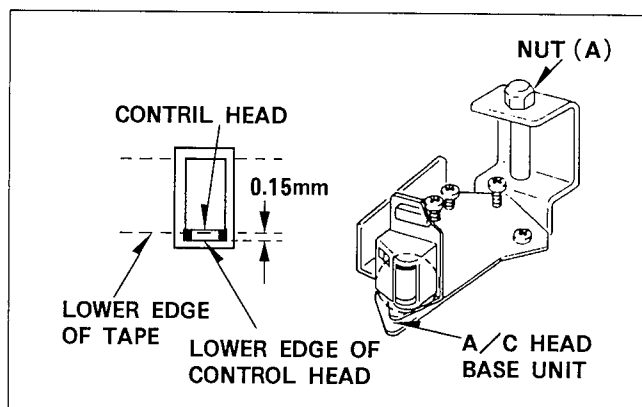


Figure M28-A



## B. COARSE ADJUSTMENT OF THE A/C HEAD TILT

Note: This procedure should be performed only when the A/C Head is replaced or posts heights are readjusted.

### << TOOL >>

Alignment Tape VFM8080HQFP  
Check Light .....VFK0948  
Screwdriver (+) Purchase locally  
VHS Vide Tape

1. Play back a VHS video tape which the amount of tape winding of a Take up Reel, Turn a screw (B) to clockwise until waving or Filling appears in the Lower edge of P4 post as Figure M28-B.

Note: There is easy method to check waving or Filling if there is waving or Filling in the lower edge. ZEBRA pattern which is reflected on the tape will curve or not linear (Figure M27-D).

2. Turn the screw (B) to counter-clockwise until waving or filling do not appear in the in the lower edge of P4 post.

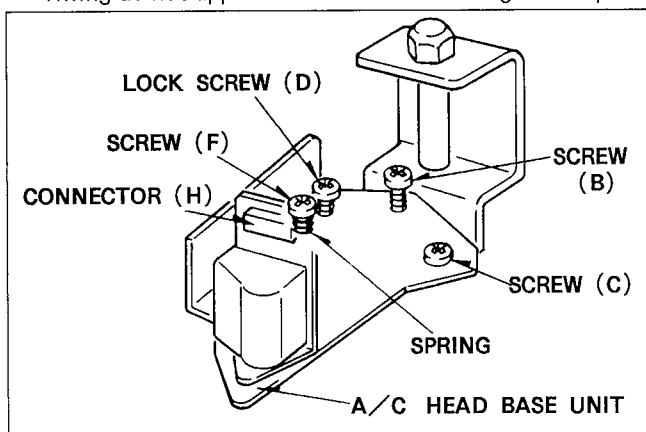


Figure M28-B

## C. ADJUSTMENT OF A/C HEAD AZIMUTH

1. Connect the scope CH1 to TP40005 (Normal Audio out put CH1) and the scope CH2 to TP40007 (Normal Audio output CH2) on the Rear Jack.
2. Play back the 2-nd portion (Normal Audio 10KHz) of the alignment tape (VFM8080HQFP).
3. Adjust the screw (C) so that these phases of both channels match as shown in Figure M28-C.

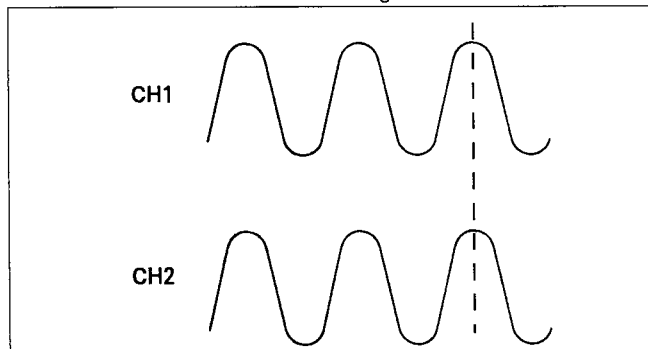


Figure M28-C

## D. TILT and AZIMUTH ADJUSTMENT OF A/C HEAD

1. Adjust the screw (C) and (B) so that CH1 and CH2 output levels become maximum, these phase of both channels much at the same time (Figure M28-D). During this adjustment the Lock screw (D) dose not touch the A/C Head Base as shown in Figures M28-E.

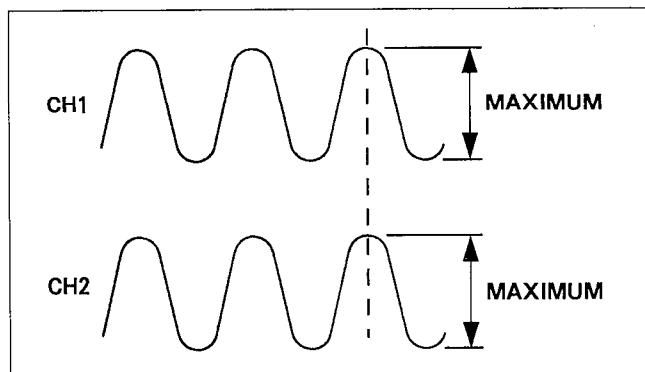


Figure M28-D

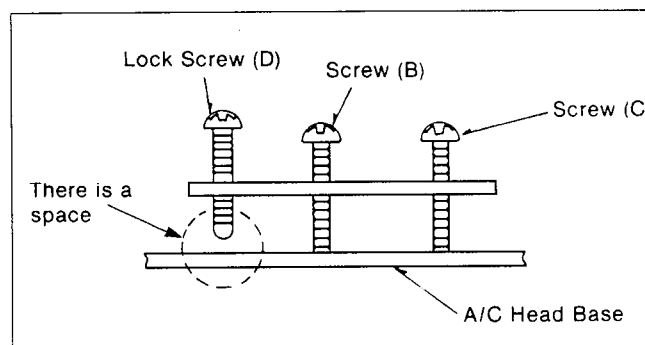


Figure M28-E

## E. ADJUSTMENT OF LOCK SCREW

1. Turn the screw (C) to clockwise so that the difference of phase of both channels become 180 degrees as shown in Figure M28-F.
2. Tighten the Lock screw (D) so that these phase of both channels match as shown in Figure M28-F.

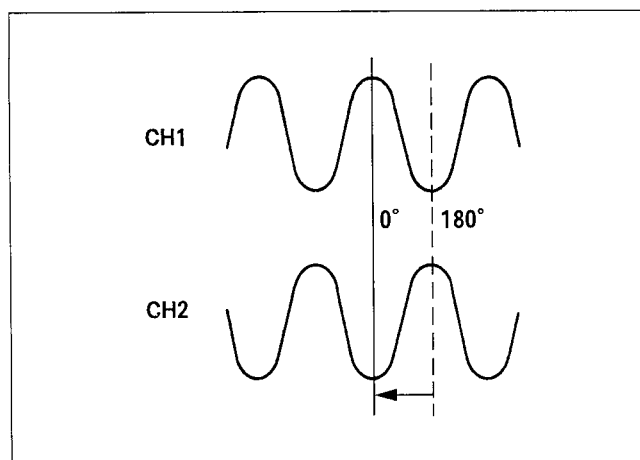


Figure M28-F



## F. FINE ADJUSTMENT OF A/C HEAD HEIGHT

Note: Before this adjustment Coarse Adjustment of the A/C Head Height should be performed.

### << TOOL >>

Alignment Tape VFM8080HQFP  
Nut Driver .....Purchase locally

1. Connect a scope CH1 to TP40005 (Normal Audio output CH1) and the scope CH2 to TP40007 (Normal Audio output CH2) on the Rear Jack C.B.A.
2. Play back the 2-nd portion (Normal Audio 10kHz) of the Alignment Tape (VFM8080HQFP).
3. Adjust the Nut (A)(Figure M28-A) so that the CH2 output level becomes maximum as shown in Figure M28-G.

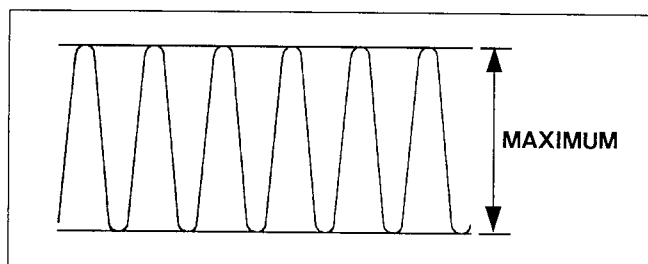


Figure M28-G

## 6-6-6. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

Note: This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

### << TOOL >>

H-Position Adjustment Screwdriver .....VFK0328  
Alignment Tape VFM8080HQFP

1. Connect a scope CH1 to Video RF Test Terminal (TP2 of the Video I/O C.B.A.) and a scope CH2 to Normal Audio CH2 output on the Rear Jack.
2. Play back the 4-the position (Monoscope 3 and Audio/Every 10-the field is skipped) of the Alignment tape VFM8080HQFP.
3. Adjust the A/C head horizontal position screw so that the phase of audio drop out and video RF envelope drop-out becomes the same as shown in Figure M29.

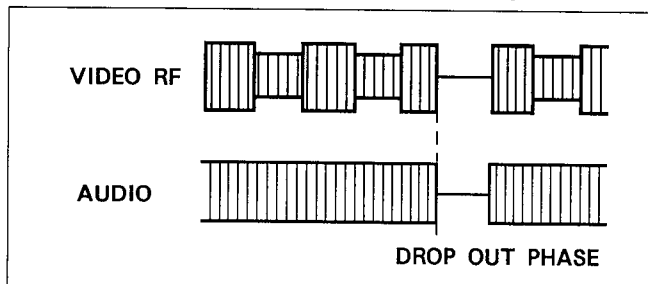


Figure M29

Note: After completion the fine adjustment of the A/C head horizontal position, the phase of Audio drop-out and Video RF envelope drop-out may be changed slightly.

## 6-6-7. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE)

Note: This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

### << TOOL >>

H-Position Adjustment Screwdriver .....VFK0328  
Alignment Tape VFM8080HQFP

1. Set the Tracking Control VR to the center fix position.
2. Connect a oscilloscope to Video RF Test Terminal(TP2 of the Video I/O C.B.A.).
3. Play back the 2-nd portion (Monoscope 2) of the alignment tape (VFM8080HQFP).
4. Adjust the Horizontal Position Screw (Figure M29) of A/C head so that the RF signal becomes maximum level as shown in Figure M30.

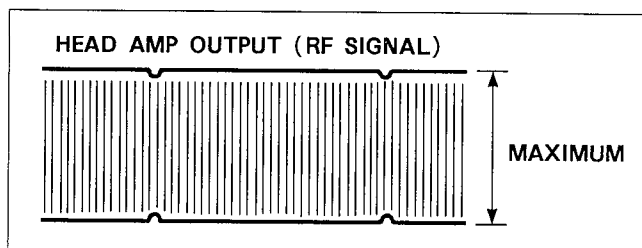


Figure M30



## 6-6-8. ADJUSTMENT OF INCLINED BASE (T)

### << TOOL >>

Check Light .....VFM0948  
Screwdriver (+) Purchase locally  
VHS Video Tape

1. Play back the beginning portion of 120 minute normal cassette tape and confirm that waving or filling of P3 post is as shown in Figure M31-A.

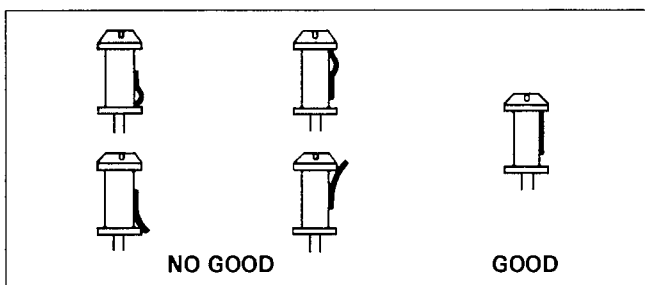


Figure M31-A

2. If there are waving at the lower and upper edge of the P3 post, Adjust the inclined base of P3 post as shown in Figure M31-B.

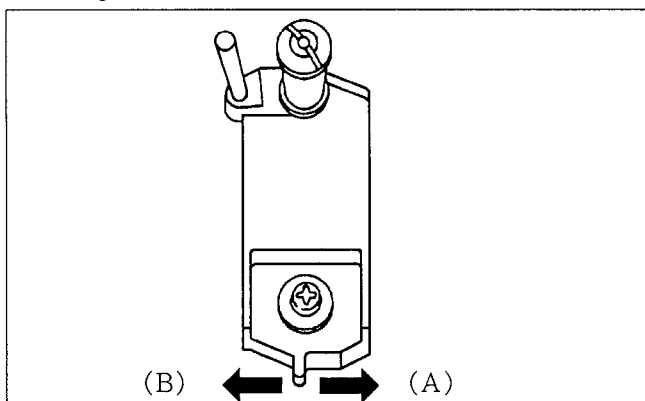


Figure M31-B

[When the inclined base is adjust to an arrow direction (B) tape becomes to lower edge.]

3. Confirm that tape position P3 post is upper edge and then tighten screw as shown in Figure M31-B.
4. Confirm that waving is occurred between upper side of P3 post and A/C head. If there is waving adjust step 2.

Note: After adjust inclined base tape interchangeability and A/C head adjustment must be required.

## 6-6-9. ADJUSTMENT OF THRUST GAP

1. Turn the thrust adjustment screw clockwise to until the capstan rotor just separate from the capstan stator whit rotating the capstan rotor by hand.
2. Turn the thrust adjustment screw clockwise to 180 degrees from paint at step 1.

3. Set the 2 oil seal to edge of the capstan housing as shown in Figure M32.

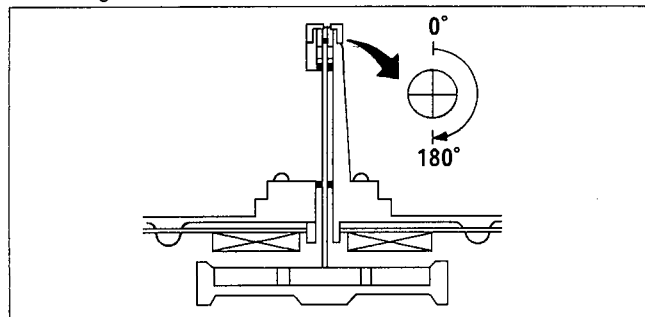


Figure M32

## 6-6-10. ADJUSTMENT OF FG GAP

### << TOOL >>

Fine Adj. screwdriver .....VFK0330  
Screwdriver .....Purchase locally

### << SPEC >>

0.13mm 0.02mm

1. Loosen screw (Q) and set the Fine Adjustment screw driver in the hole on the Capstan Stator Unit.
2. Adjust the gap between FG head and the Capstan Stator unit.
3. After adjustment tighten a screw (Q).

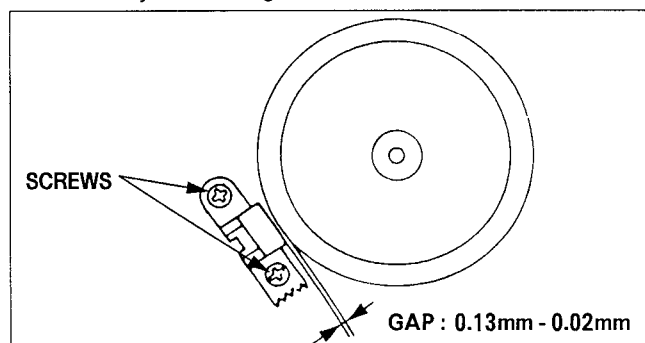


Figure M33-A

Note: After adjust FG head gap, FG output level confirmation must be required.  
Do not touch the surface of rotor and keep any magnetizable material away.

## CONFIRMATION OF FG OUTPUT LEVEL

1. Connect a oscilloscope to TP8009 (CAP FG output) on the Video 3 C.B.A.
2. Confirm that FG output level is within specification during PLAY/REC or PLAY mode.
3. If FG output level is out of specification Readjust the step 1 to 3 of FG GAP Adjustment.

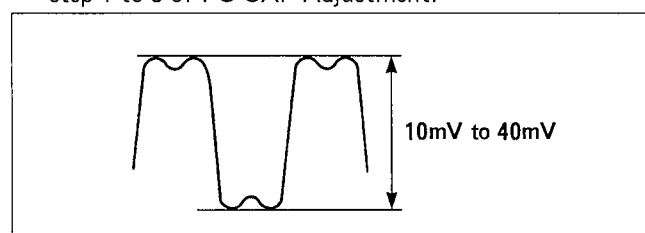


Figure M33-B



## 6-6-11. MEASUREMENT AND ADJUSTMENT OF BACK TENSION

### << TOOL >>

Back Tension Meter .....VFK0132  
VHS Cassette Tape (120min. tape except S-VHS tape)

### A. FWD TENSION ADJUSTMENT

### << SPEC >>

23g ~ 27g

1. Play back the cassette tape from the beginning and wait until the tape movement get the stabilization (for approx. 10 to 20 seconds).
2. Pull the Impedance Roller in the direction indicated the arrow in Figure M34-A secure it with a piece of adhesive tape.
3. Insert the Back Tension Meter into the path of a tape, and measure the back tension.
4. If it is out of specification, replace the Tension spring.

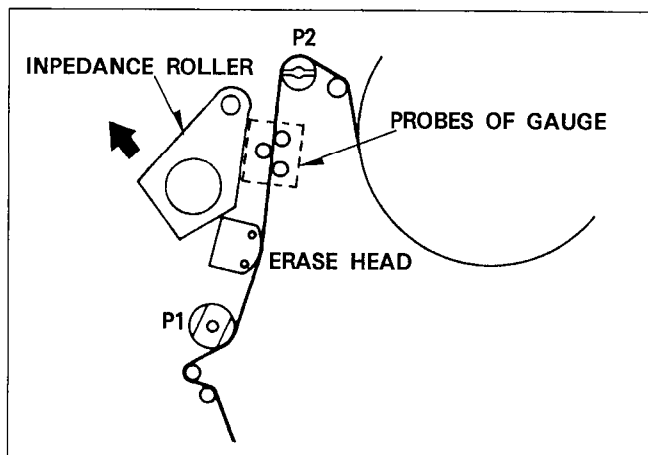


Figure M34-A

### B. REV TENSION ADJUSTMENT

### << SPEC >>

30g ~ 60g

1. Play back the cassette tape on SP Reverse Play mode from the beginning and wait until the tape movement get the stabilization (for approx. 10 to 20 seconds).
2. Pull the Impedance Roller in the direction indicated by the arrow in Figure M34-A secure it with a piece of adhesive tape.
3. Insert the Back Tension Meter into the path of a tape, and measure the back tension.
4. If it is out of specification, replace the Tension spring.

Note: While measuring, make sure that the three probes of the meter are all in good contact with the tape.  
As the tension meter is very sensitive, we recommend taking 3 separate readings.

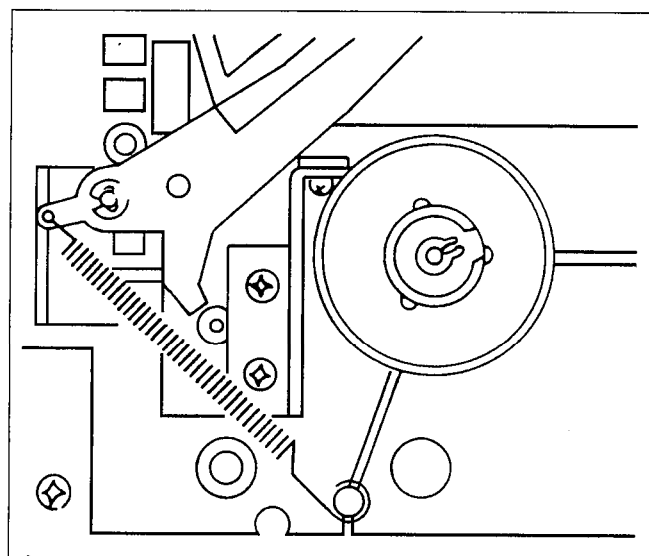


Figure M34-B

## 6-6-12. HEIGHT ADJUSTMENT OF THE REEL TABLES

### << TOOL >>

Post Adjustment Plate .....VFK1012  
Reel Table Height Gauge .....VFK0190

### << SPEC >>

0 ~ 0.15mm

1. Remove the cassette compartment.
2. Place the post Adjustment Plate on the reel tables.
3. Place the Reel Table Height Gauge on the plate so that the scraper of the gauge touches the cut- out portion of the plate, then set the gauge to zero 0 as shown in Figure M35-A.

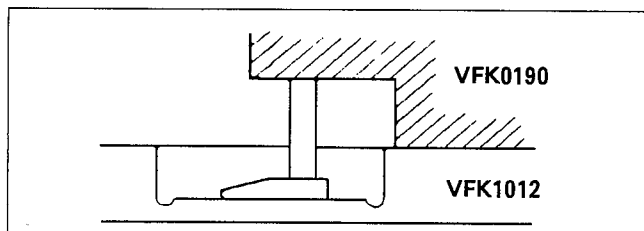


Figure M35-A

4. Measure the height of the top surface of either Reel table and note the difference in height from the plate cut-out (Figure M35-A and M35-B). Repeat this procedures for the other Reel Table.

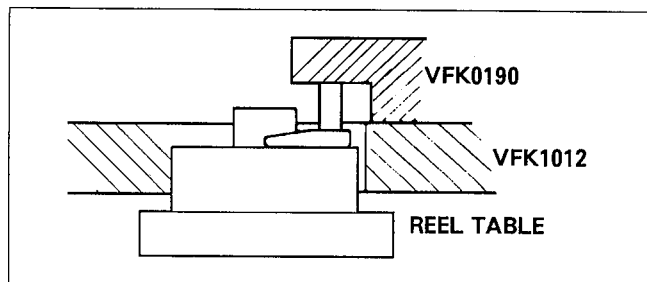


Figure M35-B



5. If the difference of Supply Reel table is more than 0.15mm higher or lower, replace the Supply Reel table. When the difference of Take Up Reel table is more than 0.15mm higher or lower, adjust nut (A) (Figure M35-C) so that measurement becomes the spec. If you can not adjust to the spec., replace Take Up Reel table.

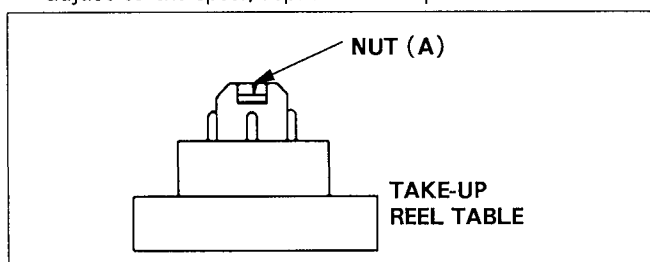


Figure M35-C

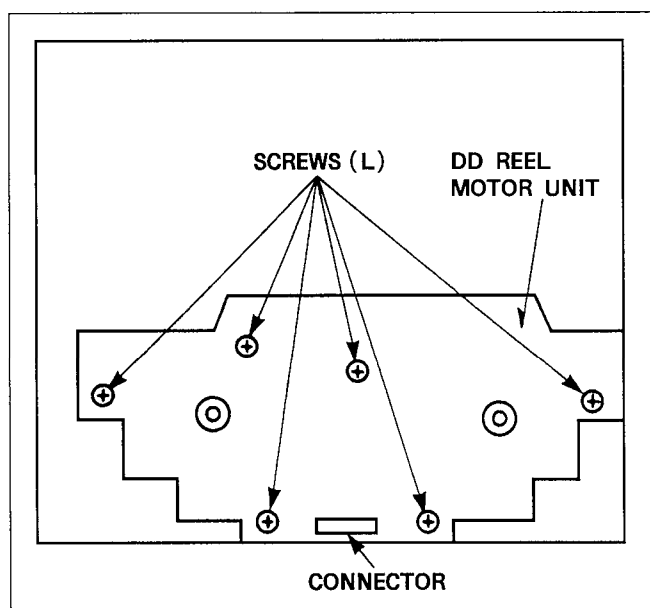


Figure M35-D

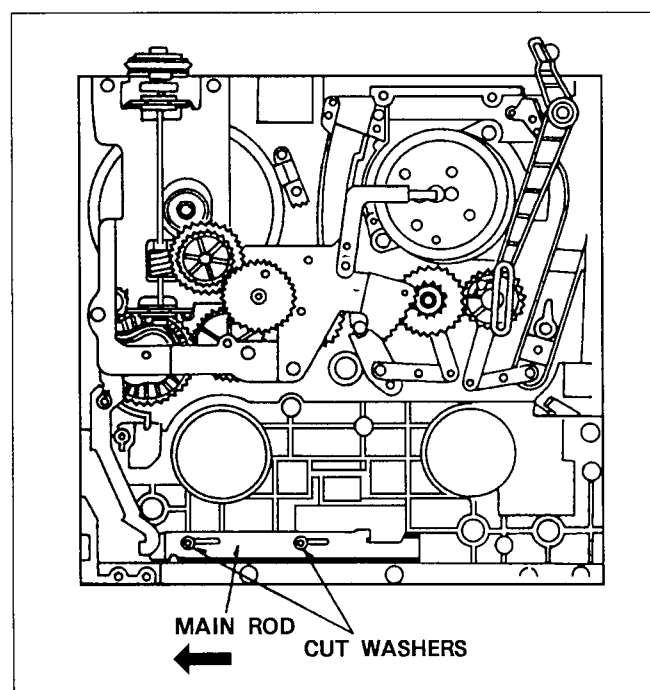


Figure M35-E

Note: When replacing the tables, the DD Reel Unit needs to be removed from the chassis. Remove 6 screws and carefully lift it out as shown in Figure M35-D. When assembling the DD Reel Unit, slide a Main Rod to far left side by rotating the Center Gear, and then screw the 6 screws.

## 6-6-13. MEASUREMENT AND ADJUSTMENT OF THE BRAKE TORQUE

### << TOOL >>

Torque Gauge .....VFK0133  
Adaptor for Gauge .....VFK0134

1. Remove the top cover and the cassette compartment.
2. Attach the adapter to the torque gauge and place the deck in STOP mode (Sub loading mode).
3. Place the torque gauge on the reel table as shown in Figure M36-A. The weight of the gauge should not rest on the reel table.
4. Turn the torque gauge in the direction indicated in Figure M36-B until the brake begins slipping and read the gauge.

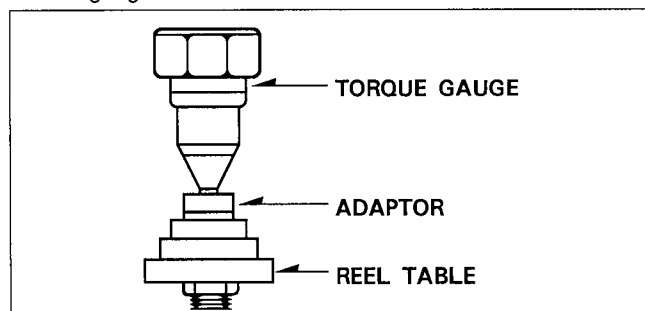


Figure M36-A

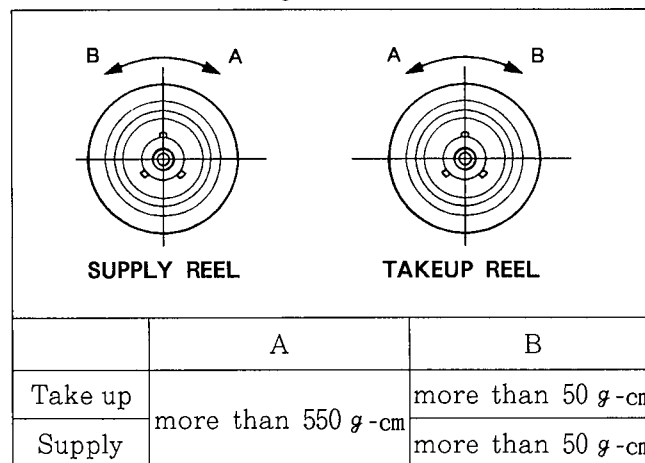


Figure M36-B

5. If it is out of specification, replace the Brake Spring.

Note: If the proper brake torque cannot be obtained by replacing the Brake Spring, clean the braking surface of the reel table with a soft cloth and re-measure the brake torque. If it's still out of specification, replace the Main Brake (S) or (T) Unit.



## 6-6-14. PRESSING FORCE CONFIRMATION OF PRESSURE ROLLER UNIT

### << TOOL >>

Fan Type Tension Gauge .....VFK66  
VHS 120min, Cassette Tape

### << SPEC >>

1050g  $\pm$  230g

1. Remove the Cassette Compartment.
2. Play back the end portion of VHS (120min.) tape.
3. Set the Fan Type Tension Gauge to the part (A) of Pinch Roller Unit.
4. Press the Arm with the Gauge, in the direction indicated by the arrow as show in Figure M37.
5. Adjust the Solenoid Base so that the reading of the Tension Gauge is 1050g  $\pm$  230g at the moment of the tape running stop.
6. If it is out of specification, replace the Tension spring.

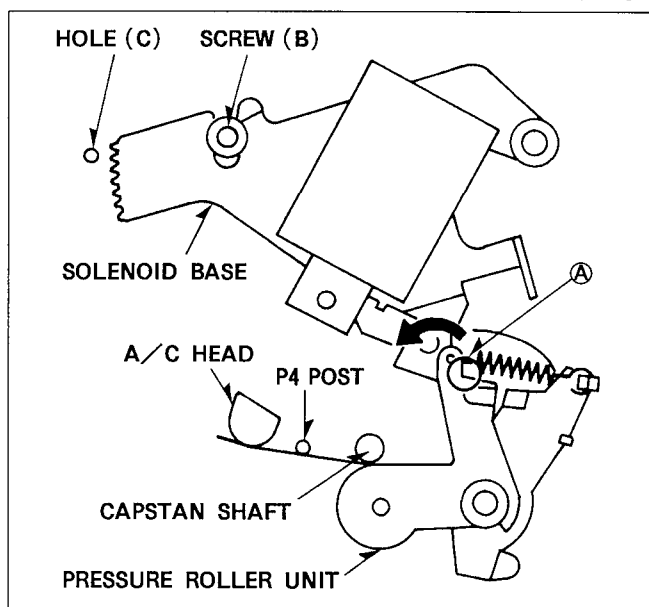


Figure M37

## 6-6-15. ADJUSTMENT OF REV TENSION SENSOR POSITION

### << TOOL >>

Tension Sensor Adj. Fixture.....VFK0806  
Tension Post Adj. Plate .....VFK0236  
Fine Adj. Screwdriver .....VFK0330  
Digital Volt Meter Purchase locally

### << SPEC >>

2.3V  $\sim$  2.7V

Note: Assemble a Tension Sensor Adjustment Fixture (VFK0806) and a Tension Post Adj. Plate (VFK0236) as shown in Figure M38-A.

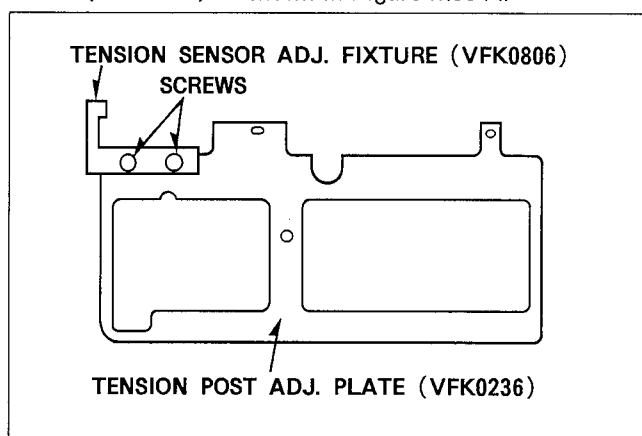


Figure M38-A

1. Remove the Top Plate and Cassette Holder Unit. (refer to Disassemble Procedures)
2. Disconnect the 4pin and 2pin flat wire to the pin 3 and 4 of the connector P1508.
3. Connect two wires of 4pin flat wire to the pin 3 and 4 of the connector P1508 as shown in Figure M38-B.

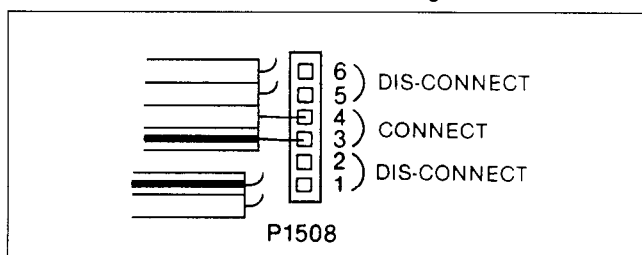


Figure M38-B

4. Push the Sub Wiper Arm (R) to direction of Cassette loading. Then the Sub Wiper Arm (R) goes down it self and mode of machine change to STOP.
5. Turn the Power switch off.
6. Remove the Cassette Compartment (refer to Disassembly Procedures).
7. Connect the V.T.V.M. of D.V.M. to TP2502 on the SERVO/SYSCON C.B.A.
8. Place the Tension Post Position Adjustment Plate with the Fixture over the reel tables as shown in Figure M38-C.



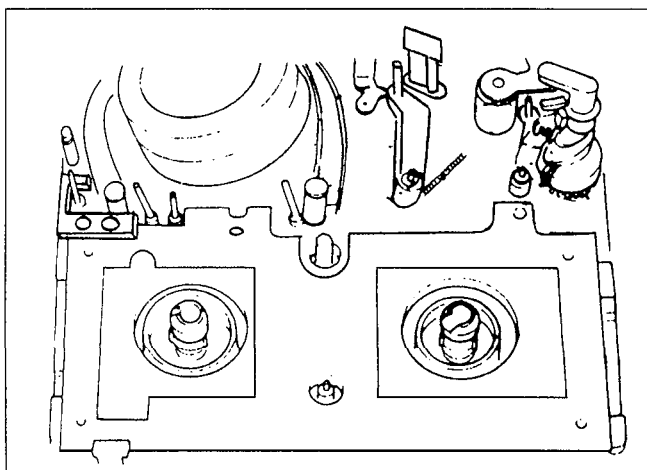


Figure M38-C

9. Turn the Power switch on.
10. Slightly loosen 2 screws (C). Insert a Fine Adj. Screwdriver in the hole (D) (Figure M38-D).

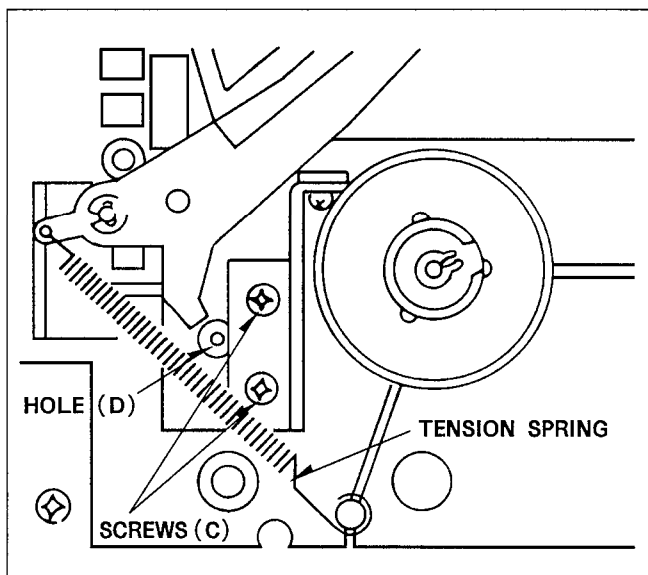


Figure M38-D

11. Press the PLAY button.
12. Adjust the Rev Sensor Position so that measurement becomes D.C. 2.3V~2.7V.
13. Tighten the 2 Screws (C).
14. Remove the Tension Sensor Fixture.
15. Reinstall the Cassette Compartment.
16. Confirm Playback picture (Rev Playback mode, Playback mode etc.)



## 6-7. ASSEMBLY AND ADJUSTMENT PROCEDURES OF MECHANISM

The mechanism of this model is mostly engaged to the System Control Circuit, through the mode select switch. Therefore the relation between the mode select switch and the cam gear decides all further mechanical movement of the mechanical parts such as levers, gears, rollers and so on. If these parts are not fixed properly, the unit will be unloaded or compulsorily stopped. And it will result being damaged at any mechanical or electrical parts. The overall mechanical condition (alignment) of bottom and top view are shown in Figure M39-A and Figure M39-B. This mechanical adjustment is performed in the STOP mode.

4. Identification hole on the Mode Select Switch at 6 o'clock position and aligned with small hole on Pinch Cam as shown in Figure M39-B.
5. P5 Arm is completely loading position and the Inclined Base (S) and (T) are completely unloading position.
6. Small hole on Sub Cam Gear should align with small hole on the Connection Gear and rectangular mark on the Connection Gear should be at a 3 o'clock position.
7. Pressure Roller Unit is UP position.

### 6-7-1. CONFIRMATION OF ALIGNMENT CONDITION

1. Remove the Loading Belt.
2. Unscrew 4 screws (F) and remove the Gear Base Unit. (Figure M39-A)
3. Turn the Center Gear to counter-clockwise until 2 big holes of Center Gear align with 2 big holes of Retainer Gear and Ring Gear and Chassis as shown in Figure M39-C.

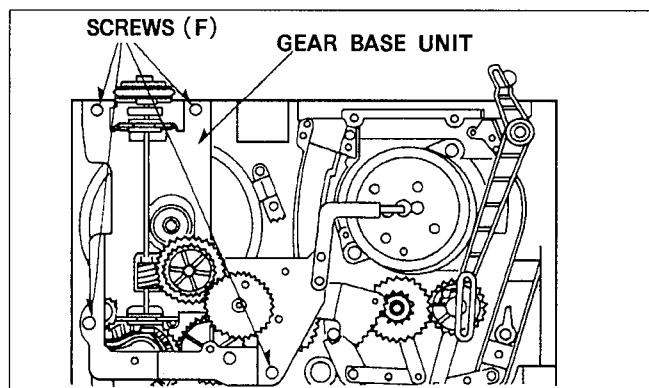


Figure M39-A

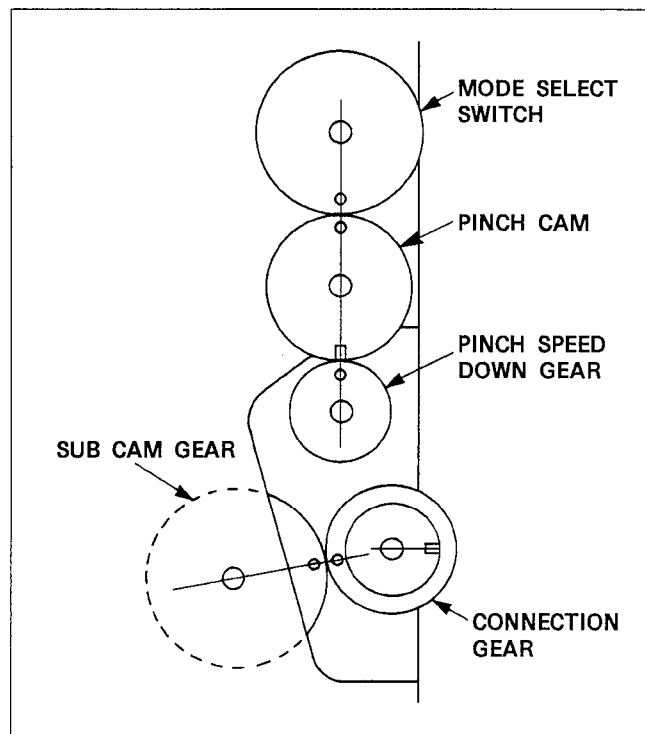


Figure M39-B Top View of Overall IQ-Mechanical Condition

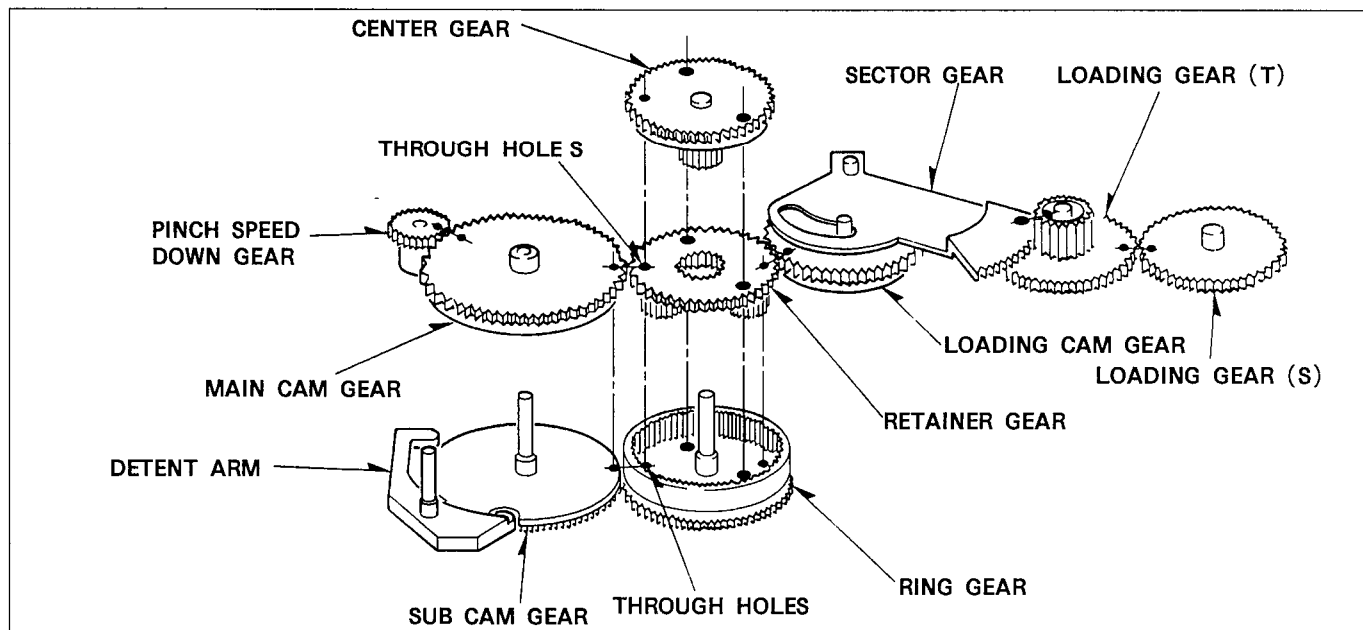


Figure M39-C Bottom View of Overall Mechanical Condition



### 6-7-2. ASSEMBLY PROCEDURES OF SUB CAM GEAR RING GEAR AND DETENT ARM

1. Install the Ring Gear so that the two holes on the Ring Gear align with the two holes on the chassis as shown in Figure M40.
2. Install the Sub Cam Gear so that the large hole on Sub Cam Gear aligns with the hole on chassis. Also the small hole (located just outside of large hole) on Sub Cam Gear should align with the hole on Ring Gear as shown in Figure M40.
3. Confirm that the small hole on Sub Cam Gear is aligned with the small hole on Connection Gear as shown in Figure M39-B (In case of the Connection Gear is already installed).
4. Install the Detent Arm and make sure Detent Arm seats perfectly in detent of Sub Cam Gear as shown in Figure M40.

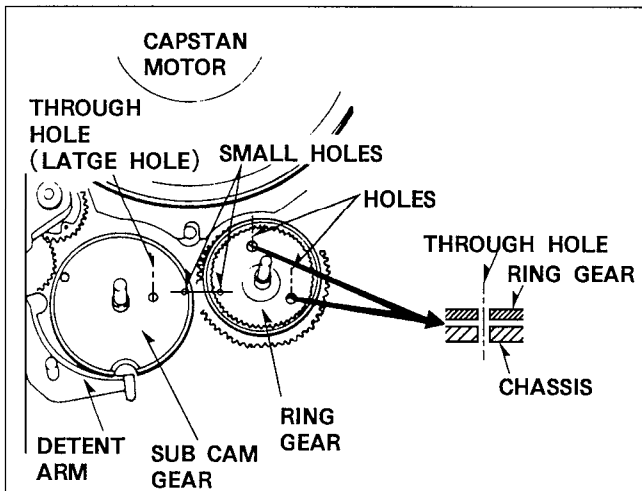


Figure M40

### 6-7-3. ASSEMBLY PROCEDURES OF MAIN CAM GEAR AND PINCH SPEED DOWN GEAR

1. Install the Main Cam Gear on to the Sub Cam Gear so that the small hole on the Main Cam Gear aligns with small hole on the Ring Gear as shown in Figure M41.
2. Insert a retaining ring.
3. Install the Pinch Speed Down Gear from top side of chassis so that the small hole on the Main Cam Gear as shown in Figure M41.

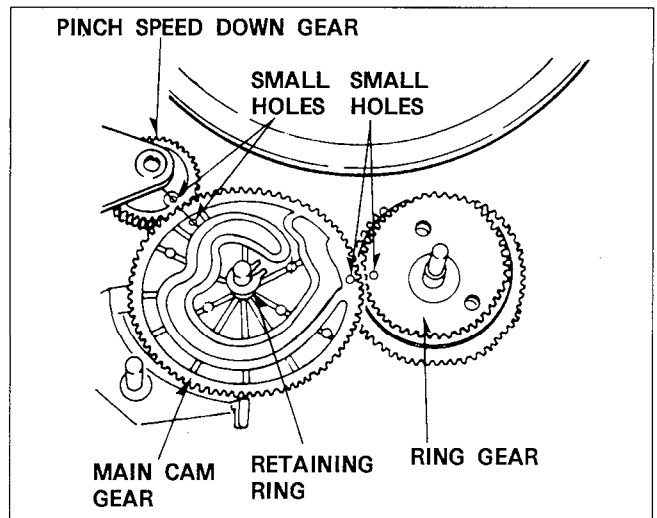


Figure M41

### 6-7-4. ASSEMBLY PROCEDURES OF LOADING CAM GEAR AND RETAINER GEAR

1. Install the Retainer Gear onto the Ring Gear so that the two holes on the Retainer Gear align with the two holes on the Ring Gear, at this time, small hole on the Main Cam Gear should align with small hole on the Retainer Gear as shown in Figure M42.
2. Install the Loading Cam Gear so that the small hole which is directly outside of the large hole on the Loading Cam Gear is aligned with the outside hole of the Retainer Gear as shown in Figure M42.

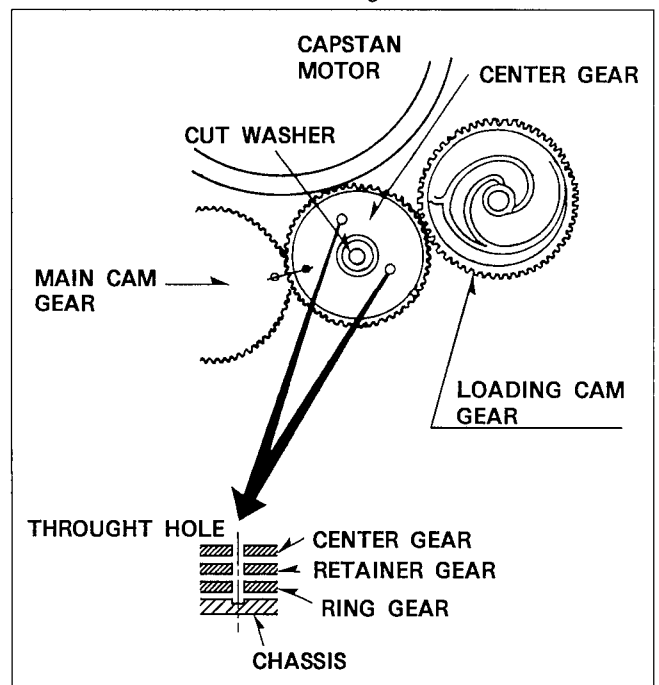


Figure M42



### 6-7-5. ASSEMBLY PROCEDURES OF CENTER GEAR

1. Softly Install the Center Gear onto the Retainer Gear so that the two holes in the Center Gear align with the holes on the Retainer Gear, then install the cut washer as shown in Figure M43.

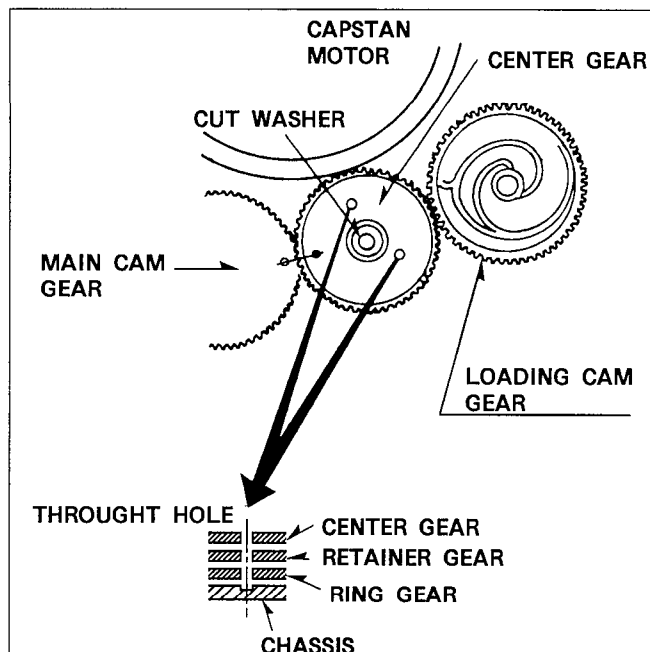


Figure M43

### 6-7-6. ASSEMBLY PROCEDURES OF MAIN LEVER AND CAM FOLLOWER ARM UNIT

1. Install the Main Rod and then insert the cut washers as shown in Figure M44.
2. Install the Cam Follower Arm so that the pin of the Cam Follower Arm inserts into the groove of the Main Cam Gear and also inserts into the slot on the Main Rod, insert the retaining ring.

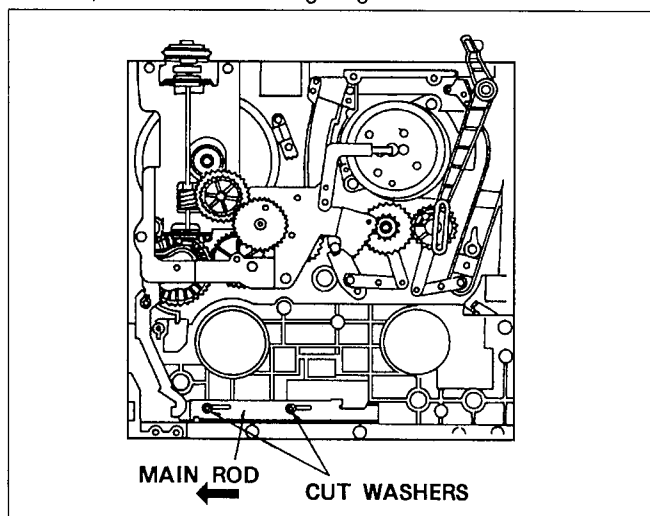


Figure M44

### 6-7-7. ASSEMBLY PROCEDURES OF LOADINGGEAR (T), LOADING GEAR (S) SECTOR GEAR

1. Set the P2 and P3 posts to fully unloaded position, then install the Loading Gear (T) and (S) so that the outer hole on the Loading Gear (T) aligns with the outer hole on the Loading Gear (S) as shown in Figure M45-A.
2. Install the Sector Gear so that the outer hole in the Sector Gear aligns with the projection mark on Loading Gear (T).
3. Insert 3 retaining rings as shown in Figure M45-B.

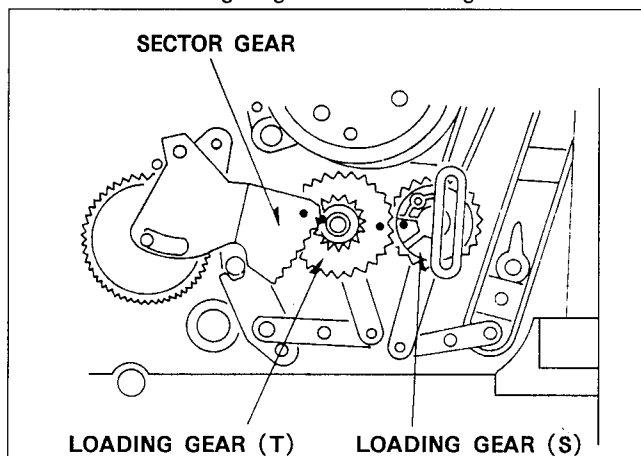


Figure M45-A

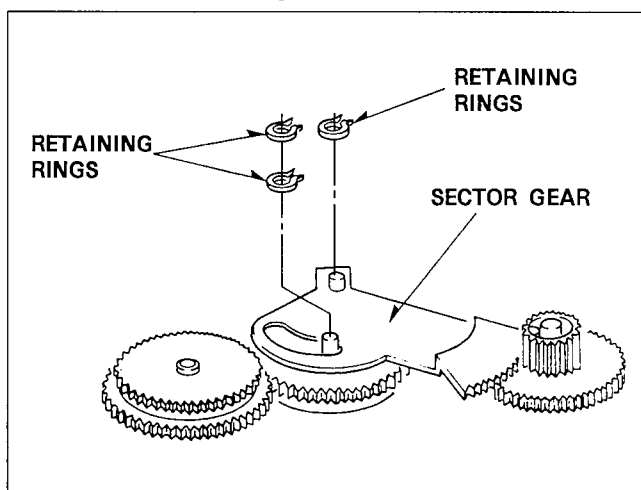


Figure M45-B



## 6-7-8. ASSEMBLY PROCEDURES OF CONNECTION GEAR

Note: Before assembling, Sub Cam Gear position (and positions of bottom side gears) must be correct as described before (Figure M39-B).

1. Install the Connection Gear so that the small hole on the Connection Gear aligns with the small hole on the Sub Cam Gear as shown in Figure M46.

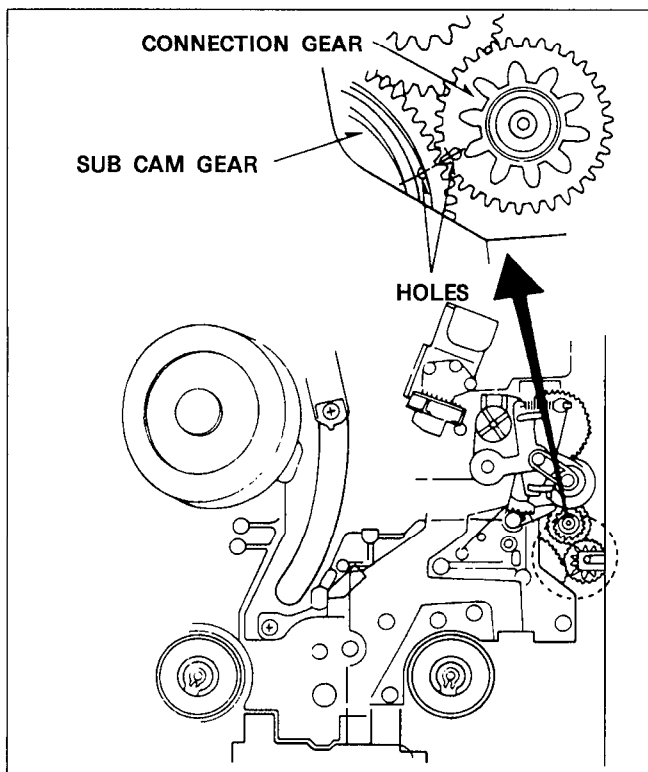


Figure M46

## 6-7-9. ASSEMBLY PROCEDURES OF MODE SWITCH AND P5 PULL OUT SECTOR GEAR

1. Turn the Center Gear to unloading position.
2. Install the mode Select Switch and tighten the mounting screw, then solder the 5 soldering portions.
3. Install the P5 Pull Out Sector Gear so that the hole of P5 Pull Out Sector Gear aligns with the tip of gear at P5 Arm as shown in Figure M47.

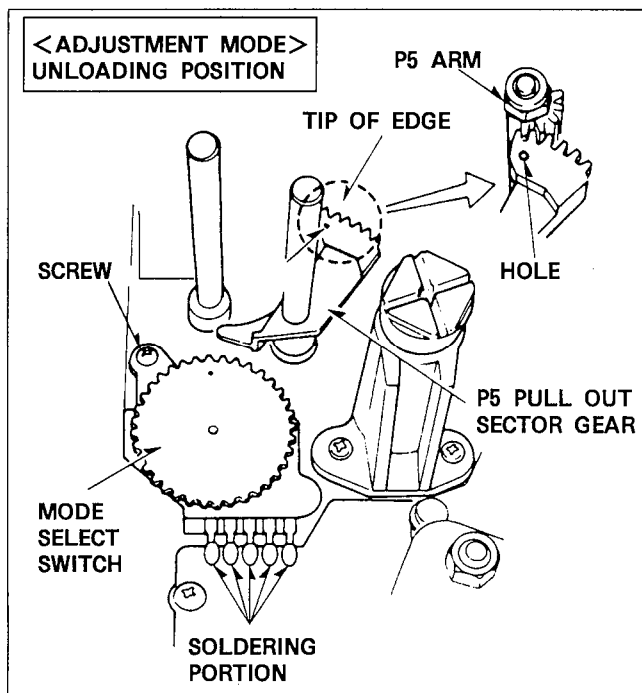


Figure M47

## 6-7-10. ASSEMBLY PROCEDURES OF PINCH CAM AND PRESSURE ROLLER UNIT

1. Install the Pinch Cam while pushing the P5 post forward. The gear of the Pinch Cam should drop to a seated position. In this position make sure hole in the Mode Select Switch aligns with small hole on the Pinch Cam, also the small rift on the Pinch Cam should align with the hole on the Pinch Speed Down Gear as shown in Figure M48.
2. Install the Pressure Roller Unit. Make sure the seats perfectly onto the Pinch Cam, then install the Pinch Cam Cap.

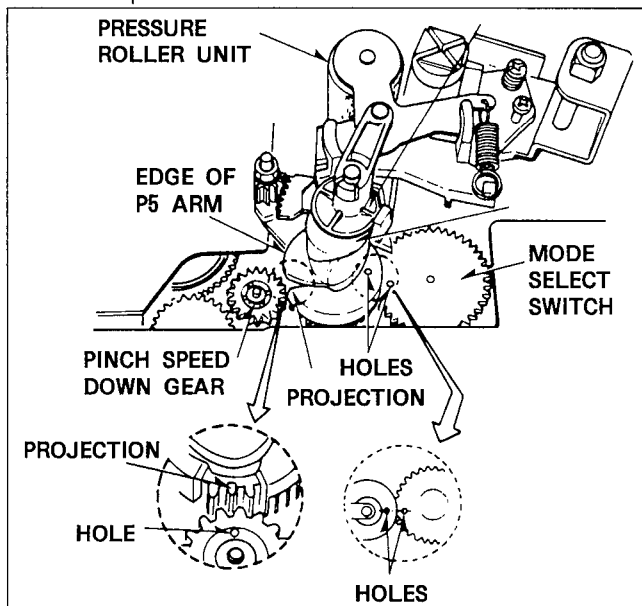


Figure M48



## 6-7-11. ASSEMBLY PROCEDURES OF GEAR BASE UNIT

1. Install the Gear Base Unit and screw 4 screws (F) as shown in Figure M49.

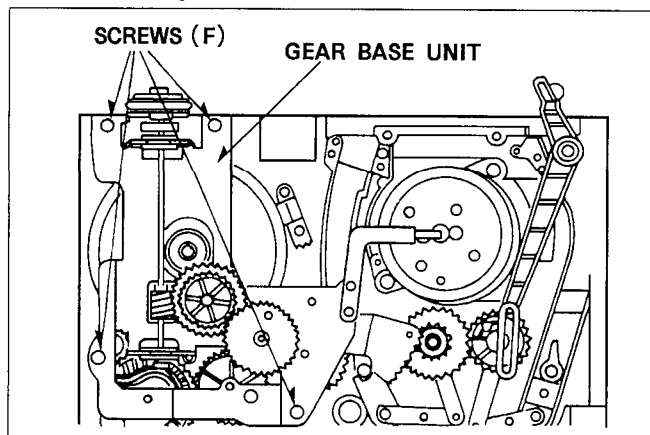


Figure M49

Note: The Gear Base Unit has 2 gears and worm shaft. There is no adjustment for these gears.

## 6-6-12. REINSTALLATION OF CASSETTE COMPARTMENT

When you reinstall the cassette compartment, the position adjustment of mechanism is necessary for correct operation, as follows.

### A. Confirmation of STOP Alignment Condition

1. Turn the Worm shaft counter-clockwise or clockwise until mechanism is placed into the Alignment Condition as following conditions.
  - a) Identification hole on the Mode Select Switch at 6 o'clock position and aligned with small hole on Pinch Cam. (Figure M48)
  - b) P5 Arm is completely loading position and the Inclined Base (S) and (T) are completely unloading position.
  - c) Small hole on Sub Cam Gear should align with small hole on the Connection Gear (Figure M46) and rectangular mark on the Connection Gear should be at a 3 o'clock position.
  - d) Pressure Roller Unit is UP position.

### B. Confirmation of Cassette Compartment

1. Confirm that the Cassette Compartment is aligned properly. In the EJECT position (Cassette Holder up and advanced to the front) the two V-shaped marks on the slide switch should align. The slide switch is located on the right side of the Cassette Assembly towards the rear as shown in Figure M50A.

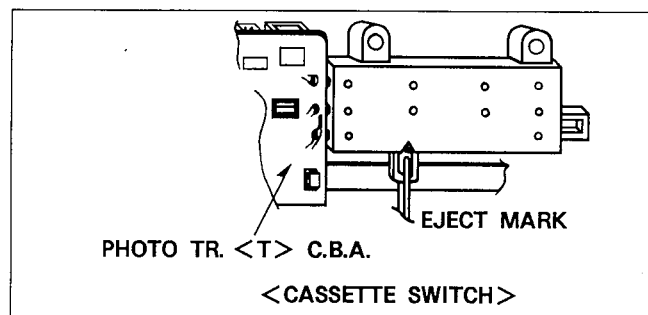


Figure M50-A

2. Remove 3 screws (A) as shown in Figure M50-B.
3. Take the top plate out.
4. Take the cassette Holder unit out as shown in Figure M50-C.

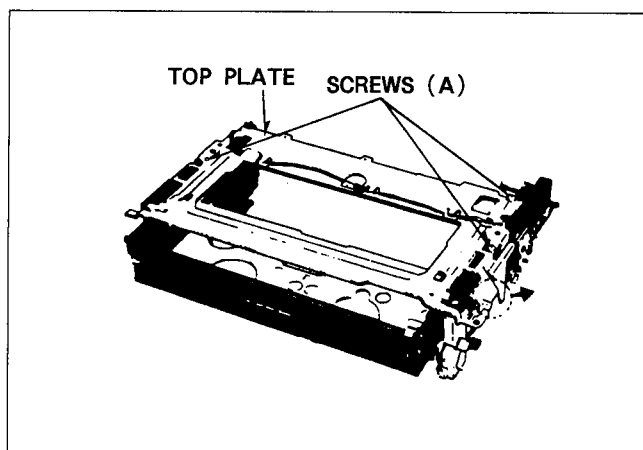


Figure M50-B

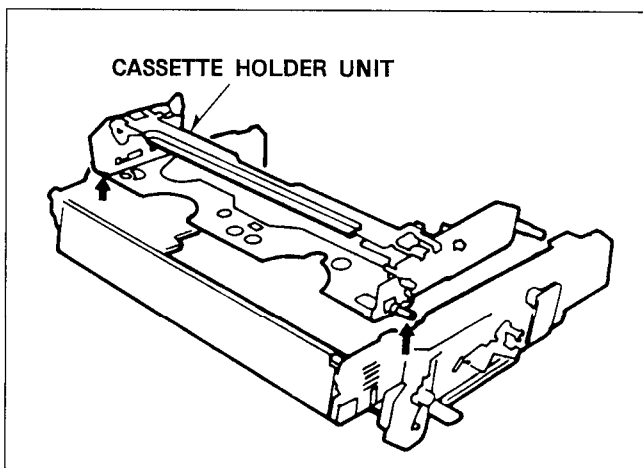


Figure M50-C Removal of Cassette Holder Unit



5. Press the sub wiper arm (R) to direction indicated by arrow so that the sub wiper arm (R) comes to cassette down position (STOP) completely as shown in Figure M50-D and keep it. In this position, the arrow on the Sub Wiper Arm (R) should align with the arrow on the Rack (A)(1) Unit as shown in Figure M50-E.

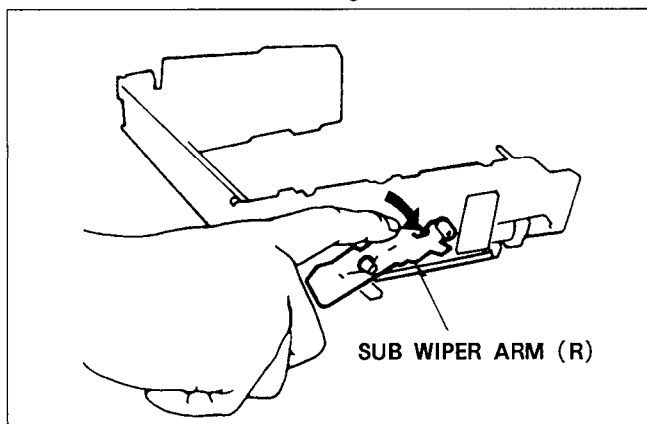


Figure M50-D

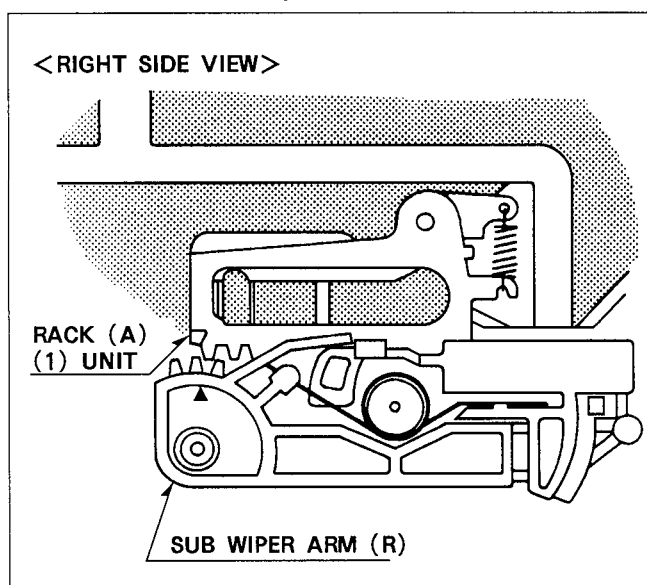


Figure M50-E

6. If the Cassette Compartment is not aligned, realignment may be accomplished by pushing the Main Shaft Unit to the right (gently) and pushing the front of the Rack Unit to the left. This procedure will disengage the teeth of the Rack Gear from the teeth on Sub Wiper Arm assembly. This will allow you to change the positional relationship between the Sub Wiper Arm Assembly and Rack Unit. This procedure is best attempted in the EJECT position. Once this is done, check for smooth operation of the compartment by inserting a cassette, and pushing in, and down.

### C. Installation Procedure

1. Bring loading mechanism to the STOP (Sub-load) position.
2. Confirm that the chassis is aligned properly for Alignment Condition as shown in Figure M39-B and M39-C.
3. Put the Sub Wiper Arm (R) in its full down position (Sub Wiper Arm should rest on plastic protrusion on the bottom of the right side plate).
4. Install the cassette compartment (without cassette holder) to chassis so that the rectangular marking (or slot) on the connection gear should be line up with first tooth of the Rack Gear as shown in Figure M50-F and M50-G.

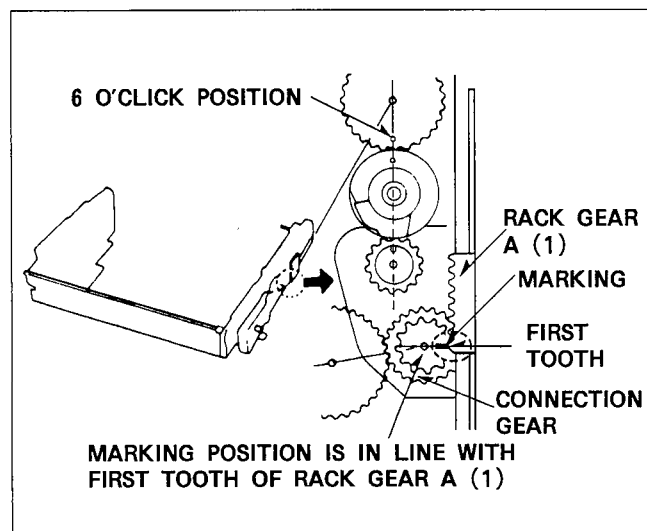


Figure M50-F

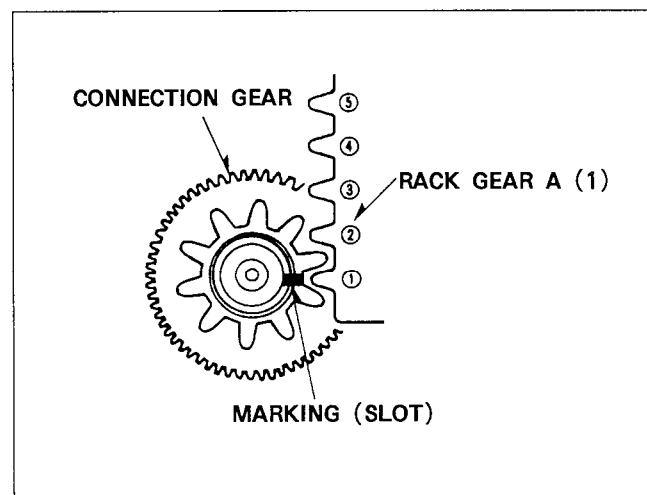


Figure M50-G



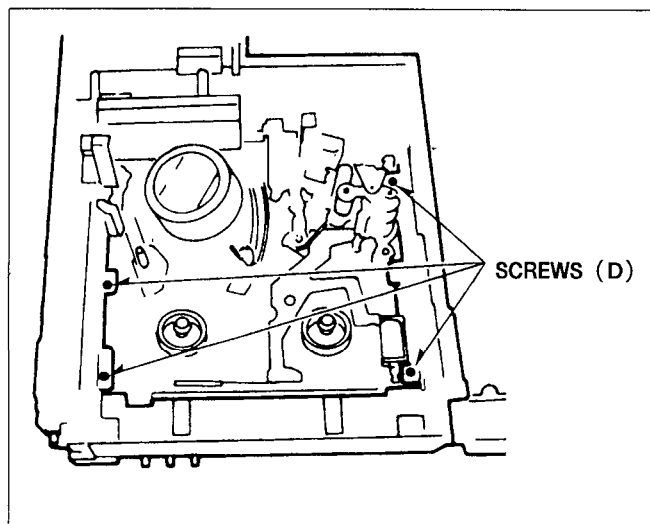


Figure M50-H

5. Tighten the 4 screws (D) as shown in Figure M50-H.
6. Manually move the loading mechanism toward the EJECT position.
7. Stop the manual eject procedure just before completion, so that the Sub Wiper Arms straight up. This position is also characterized by the channel guides (in the Wiper Arms) being directly under the cut outs on the top of the Cassette Compartment base (Figure M50-I).
8. Install the Cassette Holder Unit in the Cassette Compartment Base. The Cassette holder should drop into place if the Sub Wiper Arms are positioned as called for in step 7.

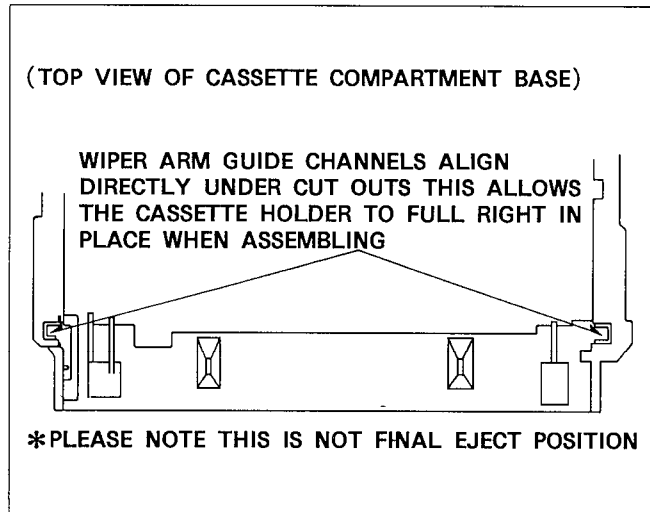


Figure M50-I

Note: For proper front loading, the guide pin on the opener lever should follow the upper track of the right side panel as shown in Figure M50-J.

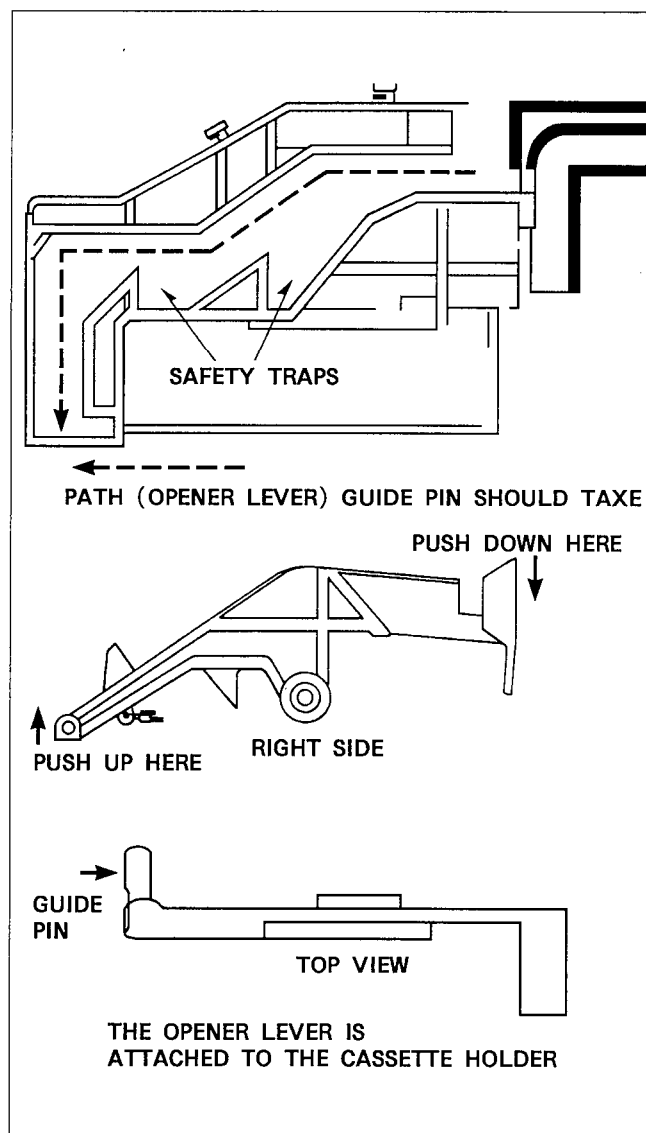


Figure M50-J Right Side Plate

9. Install the top plate on the Cassette Compartment Base and tighten the 3 screws (A) as shown in Figure M50-B.
10. Manually confirm that front loading and main loading run smoothly. Also confirm EJECT before power is applied.



# MEMO



## SECTION 7

---

# ELECTRICAL ADJUSTMENTS

---



# CONTENTS

<b>7-1. TEST &amp; SERVICE EQUIPMENT .....</b>	<b>7-4</b>
<b>7-2. HOW TO READ THE ADJUSTMENT PROCEDURE TABLE .....</b>	<b>7-4</b>
<b>7-3. SERVO SECTION .....</b>	<b>7-5</b>
7-3-1. PG Shifter Adj. ....	7-5
7-3-2. Tracking Fix Adj. ....	7-5
<b>7-4. VIDEO REC SECTION .....</b>	<b>7-5</b>
7-4-1. Drop Out Level Adj. ....	7-5
7-4-2. RF Peak Frequency Adj. ....	7-6
7-4-3. CPS Input Level Adj. ....	7-6
7-4-4. S-VHS Deviation Adj. ....	7-6
7-4-5. Chroma Rec Current Adj. ....	7-7
7-4-6. S-VHS Y Rec Current Adj. ....	7-7
7-4-7. VHS Y Rec Current Adj. ....	7-7
7-4-8. Video Level Meter Adj. ....	7-8
<b>7-5. VIDEO PB SECTION .....</b>	<b>7-8</b>
7-5-1. PB RF Chroma Level Adj. ....	7-8
7-5-2. PB Y Level Adj. ....	7-8
7-5-3. S-VHS Normal Equalizer Adj. ....	7-8
7-5-4. S-VHS SS Equalizer Adj. ....	7-9
7-5-5. VHS Equalizer Adj. ....	7-10
7-5-6. Video Tracking Meter Adj. ....	7-10
<b>7-6. TBC SECTION .....</b>	<b>7-10</b>
7-6-1. Y A/D Input (1) Adj. ....	7-10
7-6-2. Y A/D Input (2) Adj. ....	7-10
7-6-3. Y Output Level Adj. ....	7-11
7-6-4. Sync Level Adj. ....	7-11
7-6-5. C A/D Input (1) Adj. ....	7-12
7-6-6. C A/D Output Level Adj. ....	7-12
7-6-7. C A/D Input Adj. ....	7-12
7-6-8. E-E Chroma Adj. ....	7-12
7-6-9. CAC PR Level Adj. ....	7-13
7-6-10. CAC PB Level Adj. ....	7-13
7-6-11. Edit Chroma Adj. ....	7-14
7-6-12. Normal Chroma Adj. ....	7-14
7-6-13. Carrier Balance Adj. ....	7-14
7-6-14. Burst Level Adj. ....	7-15
7-6-15. Chroma Vector Balance Adj. ....	7-15
7-6-16. Burst Phase Adj. ....	7-16
7-6-17. Burst Position Adj. ....	7-16
7-6-18. Y/C Timing Adj. ....	7-16
7-6-19. PB S-VHS Y/C Delay Adj. ....	7-17
7-6-20. PB VHS Y/C Delay Adj. ....	7-17
7-6-21. Normal Y/C Timing Adj. ....	7-17
7-6-22. CAC Y/C Timing Adj. ....	7-18
7-6-23. Y Clock Phase Adj. ....	7-18
7-6-24. PLL Lock Adj. ....	7-18
7-6-25. C Clock Phase Adj. ....	7-18
7-6-26. Head Switch Adj. ....	7-19
7-6-27. S/H Adj. ....	7-19
7-6-28. 14.3MHz VCO Adj. ....	7-19
7-6-29. Ref. SCH Adj. ....	7-20
7-6-30. SCH Phase Adj. ....	7-20
7-6-31. System H Phase Adj. ....	7-20
7-6-32. Video Phase Adj. ....	7-21
7-6-33. System SC Phase Adj. ....	7-21



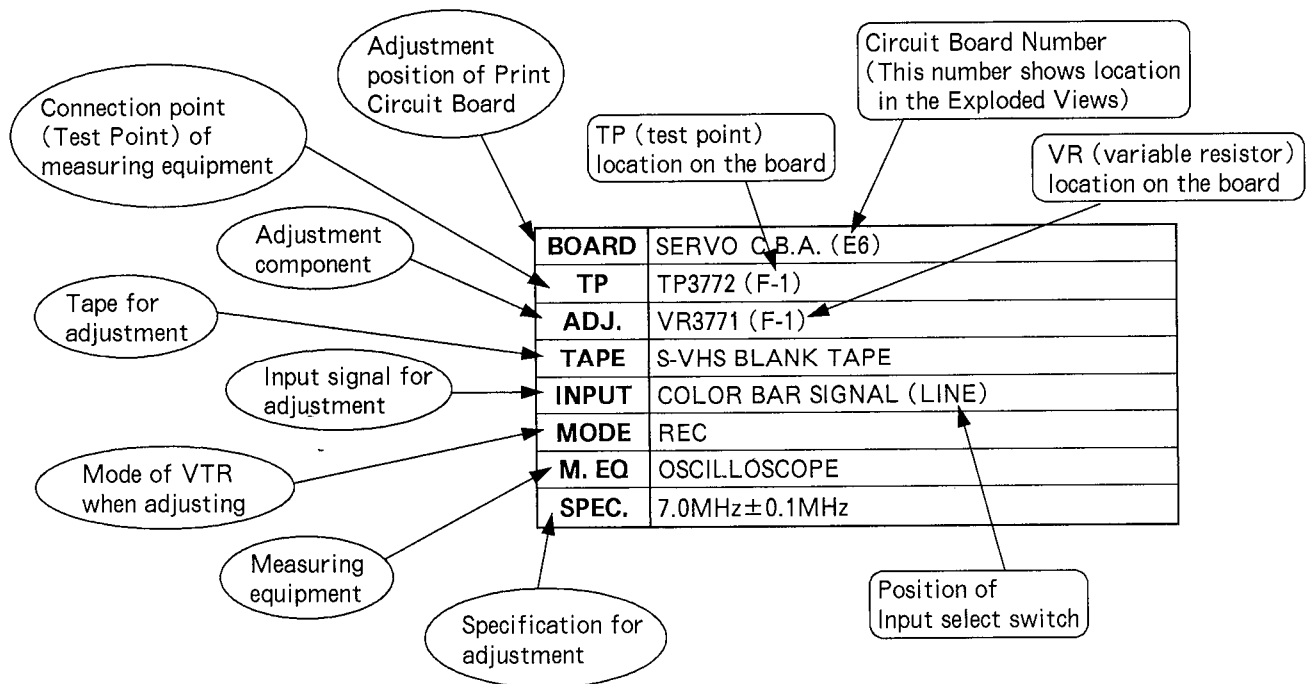
<b>7-7. AUDIO SECTION</b>	<b>7-22</b>
7-7-1. Normal Audio Input Level Adj.	7-22
7-7-2. Hi-Fi Audio Input Level Adj.	7-22
7-7-3. Audio Jack Output Balance Adj.	7-22
7-7-4. Audio Level Meter Adj.	7-23
7-7-5. Normal Audio Playback Frequency Response Adj.	7-23
7-7-6. Normal Audio PB Gain Adj.	7-24
7-7-7. Normal Audio Erase Current Adj.	7-24
7-7-8. Normal Audio Bias Current Adj.	7-24
7-7-9. Normal Audio General Frequency Response Adj.	7-25
7-7-10. Normal Audio Time Code Meter Adj.	7-25
7-7-11. Hi-Fi Audio Head Switching Shifter Adj.	7-25
7-7-12. Hi-Fi Audio Carrier Frequency Adj.	7-26
7-7-13. Hi-Fi Audio Deviation Adj.	7-26
7-7-14. Normal Audio Rec Current Adj.	7-27
7-7-15. Hi-Fi Audio Rec Current Adj.	7-27
<b>7-8. OTHER SECTION</b>	<b>7-28</b>
7-8-1. VITC Mute Pulse Adj.	7-28
7-8-2. OSD Character Width Adj.	7-28
7-8-3. Flying Erase Current Adj.	7-28



## 7-1. TEST & SERVICE EQUIPMENT

No.	EQUIPMENT	CAPACITY
1	D.V.M. (Digital Volt Meter)	0.001 to 50V
2	Dual-Trace Oscilloscope (with Probes)	0.005 to 50V/div, DC to 100MHz (50MHz)
3	Frequency Counter	0 to 10MHz
4	Sinewave Signal Generator (RC Oscillator)	0 to 10MHz
5	Video Sweep Generator	0 to 10MHz
6	Waveform Monitor	
7	Video Signal Generator (Composite, Y/C)	video signal with 7.5% set-up
8	Spectrum Analyzer	
9	Vector Scope	
10	SCH Meter	
11	Color Monitor TV	
12	VHS Alignment Tape (VFM8080HQFP)	
13	Extender Board (VFK0941)	

## 7-2. HOW TO READ THE ADJUSTMENT PROCEDURES TABLE





## 7-3. SERVO SECTION

### 7-3-1. PG SHIFTER ADJ.

#### ◀ NOTE ▶

Tape Interchangeability Adjustment should be always completed before this adjustment.

BOARD	SERVO & SYSTEM CTL C.B.A. (E3)
TP	TP41003 (G-1):AUDIO (2) C.B.A.(CH2.TRIG) TP3307 (B-1):VIDEO I/O C.B.A.(CH1)
ADJ.	VR2001 (H-5)
TAPE	VFM8080HQFP PORTION:2
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	T=7.5H±0.25H

#### ◀ SET UP ▶

SYNC : NORM (MENU NO.1001)  
FRAME SERVO : OFF (MENU NO.6005)  
TRACKING VR : CENTER (FIX)

1. Playback the adjustment tape the portion 2.
2. Connect the oscilloscope to TP3307 for CH-1 and TP41003 for CH-2.(Trigger)
3. Adjust VR2001 so that "T" becomes 7.5H ± 0.25H as shown in Figure E1.

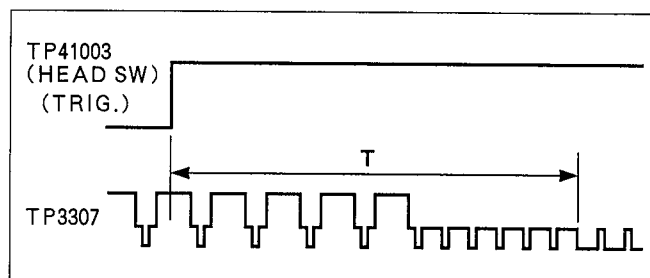


Figure E1

### 7-3-2. TRACKING FIX ADJ.

BOARD	SERVO & SYSTEM CTL C.B.A. (E3)
TP	TP41003 (G-1):AUDIO (2) C.B.A. TP61004 (D-1):INTERFACE C.B.A.
ADJ.	VR2003 (H-6):SERVO&SYSTEM CTL C.B.A.
TAPE	VFM8080HQFP PORTION:2
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	T=0.4msec.±0.1msec.

#### ◀ SET UP ▶

SYNC : NORM (MENU NO.1001)  
FRAME SERVO : OFF (MENU NO.6005)  
TRACKING VR : CENTER (FIX)

1. Playback the adjustment tape the portion 2.
2. Connect the oscilloscope to TP61004 for CH-1 and TP41003 for CH-2.
3. Adjust VR2003 so that the "T" becomes 0.4msec ± 0.1msec as shown in Figure E2.

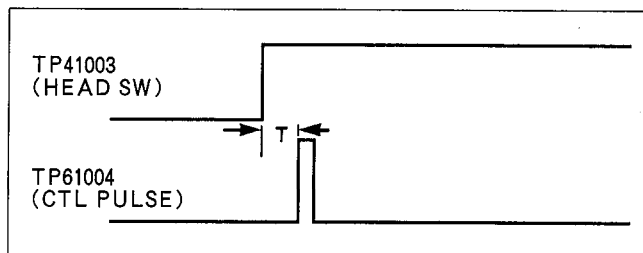


Figure E2

## 7-4. VIDEO REC SECTION

### 7-4-1. DROP OUT LEVEL ADJ.

BOARD	VIDEO DIGITAL C.B.A. (E6)
TP	TP3772 (F-1)
ADJ.	VR3771 (F-1)
TAPE	S-VHS BLANK TAPE
INPUT	COLOR BAR SIGNAL (LINE)
MODE	REC
M. EQ	OSCILLOSCOPE (more than 100MHz)
SPEC.	700mVp-p±70mVp-p

#### ◀ NOTE ▶

Use a oscilloscope that is more than 100MHz range and increase the intensity.

#### ◀ SET UP ▶

IMAGE MODE SELECT : NORMAL (MENU NO.2001)  
VIDEO MODE : COLOR (MENU NO.2002)  
S-VHS REC : ON (MENU NO.2006)  
CH2 METER SW : VIDEO TRACKING  
VIDEO LEVEL control : PUSH (AGC : ON)  
INPUT SW : LINE

1. Place the deck in the REC mode with S-VHS mode.
2. Connect the oscilloscope to TP3772.
3. Adjust VR3771 so that the level becomes 700mVp-p ± 70mV as shown in Figure E3.

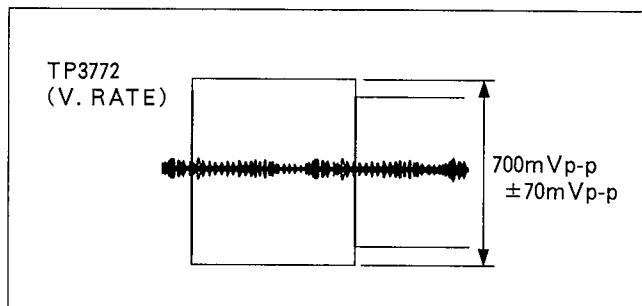


Figure E3



### 7-4-2. RF PEAK FREQUENCY ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3003 (F-1)
ADJ.	VR3015 (E-1)
TAPE	
INPUT	TP3002: VIDEO SWEEP SIGNAL (150mVp-p)
MODE	STOP
M. EQ	OSCILLOSCOPE
SPEC.	7MHz $\pm$ 0.1MHz (FIG. E4-B)

#### ≪ SET UP ≫

IMAGE MODE SELECT : EDIT (MENU NO.2001)

1. Connect a jumper wire between TP3001 and GND (TPG3001).
2. Supply a 150mVp-p (in connected) sweep signal to TP3002 as shown in Figure E4-A.
3. Connect the oscilloscope to TP3003 and adjust VR3015 so that the peak frequency becomes 7.0MHz  $\pm$  0.1MHz as shown in Figure E4-B.

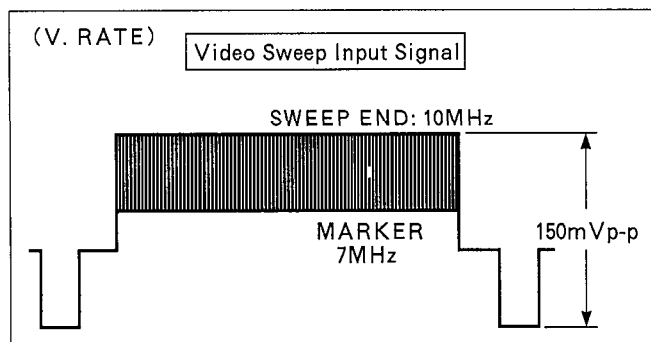


Figure E4-A

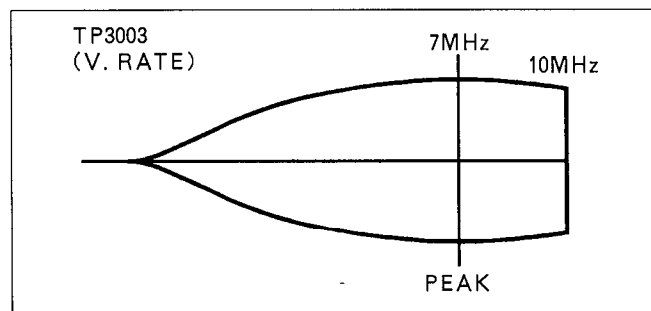


Figure E4-B

### 7-4-3. CPS INPUT LEVEL ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3008 (A-1)
ADJ.	VR3001 (A-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	1.5Vp-p $\pm$ 0.05Vp-p

#### ≪ SET UP ≫

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

INPUT SW : LINE

1. Connect the oscilloscope to TP3008.
2. Adjust VR3001 so that the level becomes 1.5Vp-p  $\pm$  0.05Vp-p as shown in Figure E5.

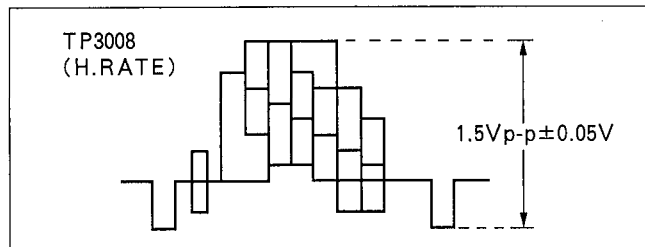


Figure E5

### 7-4-4. S-VHS DEVIATION ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3201 (D-3)
ADJ.	VR3003 (f0)(B-1), VR3006 (DEV)(A-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	1.5Vp-p $\pm$ 0.1Vp-p (FIG. E6)

#### ≪ SET UP ≫

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

INPUT SW : LINE

USE EXTENDER BOARD for VIDEO I/O C.B.A.

1. Connect the oscilloscope to TP3201.
2. Adjust VR3003 so that the white peak (100%) level becomes maximum and the beat on the sync tip portion of the color bar signal becomes minimum as shown in Figure E6.
3. Adjust VR3006 so that the level of color bar signal becomes 1.5Vp-p  $\pm$  0.1Vp-p as shown in Figure E6.

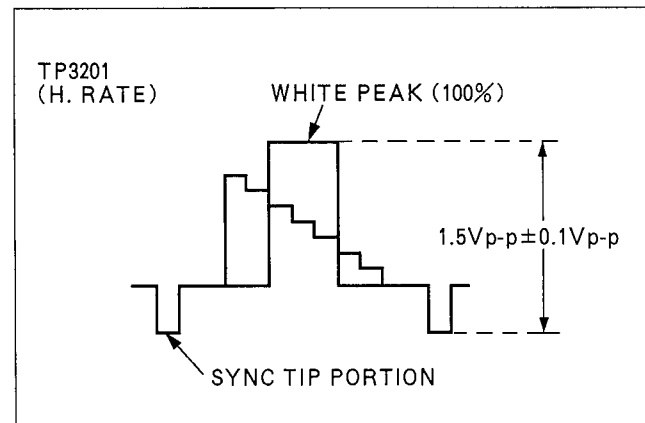


Figure E6



**7-4-5. CHROMA REC CURRENT ADJ.**

<b>BOARD</b>	HEAD AMP C.B.A. (E15)
<b>TP</b>	TP5003 (HOT)(B-4), TP5002 (GND)(B-4)
<b>ADJ.</b>	VR5002 (B-4)
<b>TAPE</b>	S-VHS BLANK TAPE
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	REC
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	50mVp-p ± 2mVp-p

**≪ SET UP ≫**

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

INPUT SW : LINE

1. Turn VR5001 fully clockwise to eliminate Y carrier.
2. Connect the oscilloscope to TP5003 with an 1:1 probe.
3. Adjust VR5002 so that the cyan level becomes 50mVp-p ± 2mV as shown in Figure E7.

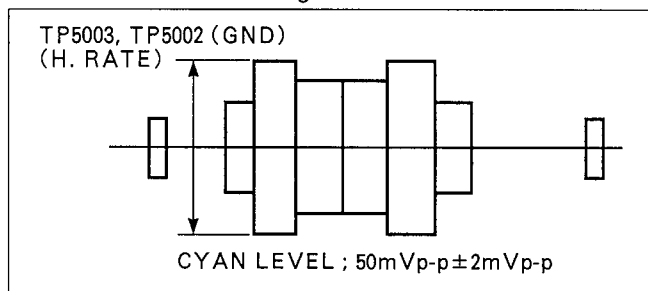


Figure E7

**≪ NOTE ≫**

After this adjustment is finished, adjust 7-4-6. S-VHS Y REC Current Adj.

**7-4-6. S-VHS Y REC CURRENT ADJ.****≪ NOTE ≫**

This adjustment should be performed only after completion of 7-4-5. Chroma REC Current Adj.

<b>BOARD</b>	HEAD AMP C.B.A. (E15)
<b>TP</b>	TP5003 (HOT)(B-4), TP5002 (GND)(B-4)
<b>ADJ.</b>	VR5001 (B-4)
<b>TAPE</b>	S-VHS BLANK TAPE
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	REC
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	175mVp-p ± 5mVp-p

**≪ SET UP ≫**

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

INPUT SW : LINE

1. Connect the oscilloscope to TP5003 with an 1:1 probe.
2. Adjust VR5001 so that the sync tip level becomes 175mVp-p ± 5mV as shown in Figure E8.

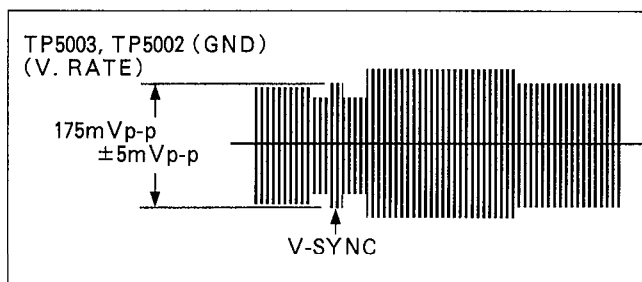


Figure E8

**7-4-7. VHS Y REC CURRENT ADJ.****≪ NOTE ≫**

This adjustment should be performed only after completion of 7-4-5. Chroma REC Current Adj. and 7-4-6. S-VHS Y REC Current Adj.

<b>BOARD</b>	HEAD AMP C.B.A. (E15)
<b>TP</b>	TP5003 (HOT)(B-4), TP5002 (GND)(B-4)
<b>ADJ.</b>	VR3305 (F-1): VIDEO I/O C.B.A.
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	REC
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	180mVp-p ± 5mVp-p

**≪ SET UP ≫**

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

S-VHS REC : OFF (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

INPUT SW : LINE

1. Connect the oscilloscope to TP5003 with an 1:1 probe..
2. Adjust VR3305 so that the sync tip level becomes 180mVp-p ± 5mVp-p as shown in Figure E9.

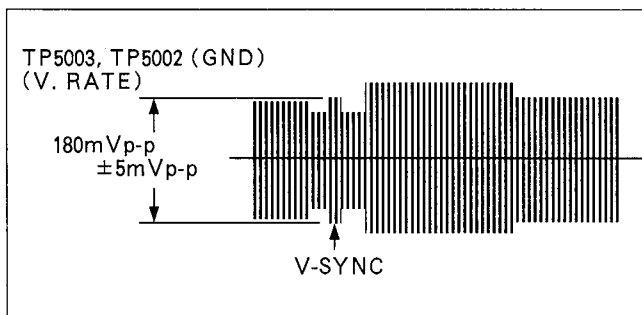


Figure E9



## 7-4-8. VIDEO LEVEL METER ADJ.

### ≪ NOTE ≫

This adjustment should be performed only after completion of 7-4-4. S-VHS Deviation Adj.

BOARD	VIDEO I/O C.B.A. (E5)
TP	VIDEO LEVEL METER
ADJ.	VR3301 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (S-VIDEO)
MODE	EJECT (E-E)
M. EQ	
SPEC.	REFER TO FIG E10

### ≪ SET UP ≫

IMAGE MODE SELECT : EDIT (MENU NO.2001)

PB/EE SELECT : EE (MENU NO.2004)

VIDEO LEVEL control : PUSH (AGC : ON)

INPUT SW : S-VIDEO

1. Adjust VR3301 so that the needle of VIDEO LEVEL METER becomes at point as shown in Figure E10.

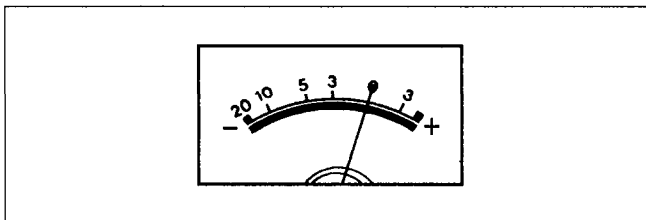


Figure E10

## 7-5. VIDEO PB SECTION

### 7-5-1. PB RF CHROMA LEVEL ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3005 (B-1)
ADJ.	VR3201 (D-1)
TAPE	C.B. SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	0.7Vp-p $\pm$ 0.05Vp-p

### ≪ SET UP ≫

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the oscilloscope to TP3005.
2. Adjust VR3201 so that the cyan level becomes 0.7Vp-p  $\pm$  0.05Vp-p as shown in Figure E11.

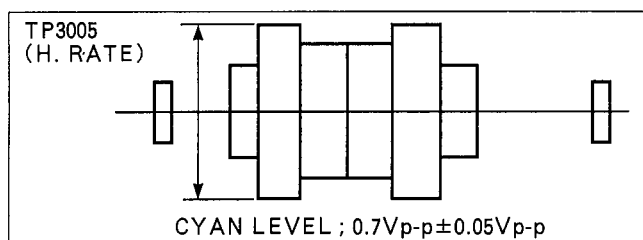


Figure E11

### 7-5-2. PB Y LEVEL ADJ.

### ≪ NOTE ≫

This adjustment should be performed only after completion of 7-4-4. S-VHS Deviation Adj.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3307 (B-1)
ADJ.	VR3202 (D-3)
TAPE	C.B. SELF RECORDED TAPE (S-VHS)
INPUT	COLOR BAR SIGNAL
MODE	PLAYBACK, STOP (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	PLAY LEVEL = E-E LEVEL $\pm$ 0.05Vp-p

### ≪ SET UP ≫

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC : ON)

1. Playback the color bar signal self recorded tape by S-VHS mode.
2. Connect the oscilloscope to TP3307.
2. Adjust VR3202 so that the playback Y level becomes the same ( $\pm$  0.05Vp-p) as the stop (EE) Y level as shown in Figure E12.

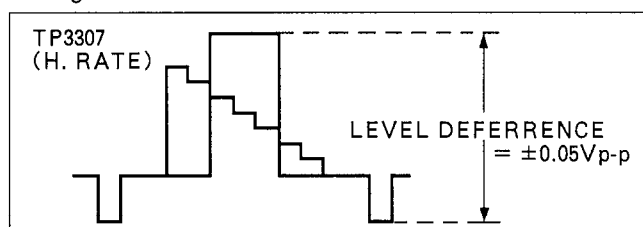


Figure E12

### 7-5-3. S-VHS NORMAL EQUALIZER ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3307 (B-1)
ADJ.	VR3010 (L CH), VR3011 (R CH)
TAPE	30% VIDEO SWEEP (B/W) SIGNAL SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	100KHz:4MHz = 5:3.5 $\pm$ 0.5



### ◀ SET UP ▶

IMAGE MODE SELECT : EDIT (MENU NO.2001)

S-VHS REC : ON (MENU NO.2006)

VIDEO LEVEL control : PUSH (AGC: ON)

1. Play back the 30% sweep signal (Figure E13-A) self recorded tape by S-VHS mode. (Vary the vertical scope setting until the 100KHz level reaches 5 divisions)
2. Connect the oscilloscope to TP3307.
3. Adjust VR3010 (L CH) and VR3011 (R CH) so that the level becomes as shown in Figure E13-B.

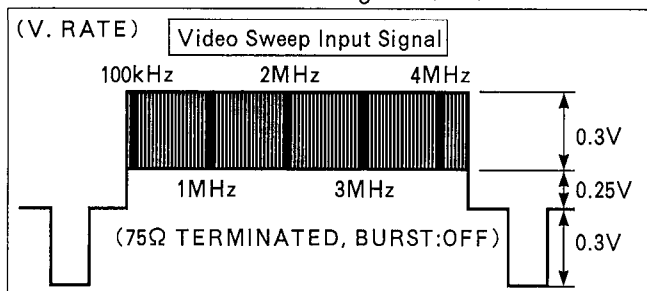


Figure E13-A

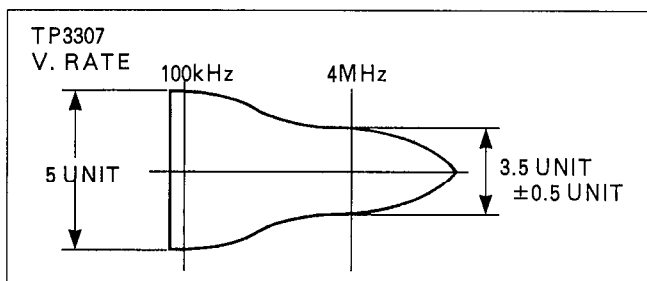


Figure E13-B

### 7-5-4. S-VHS SS EQUALIZER ADJ.

#### ◀ NOTE ▶

*This adjustment should be performed only after completion of 7-5-3. S-VHS Normal Equalizer Adj.*

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3307 (B-1), TP8502 (E-1): TBC (1) C.B.A.
ADJ.	VR3008 (L' CH)(E-1), VR3009 (R' CH)(E-1)
TAPE	30% VIDEO SWEEP (B/W) SIGNAL SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	JOG
M. EQ	OSCILLOSCOPE
SPEC.	FIG. E14-A, B

### ◀ SET UP ▶

IMAGE MODE SELECT : EDIT (MENU NO.2001)

S-VHS REC : ON (MENU NO.2006)

DIGITAL SLOW SW : OFF

1. Play back the 30% sweep signal (Figure E13-A) self recorded tape by S-VHS mode.
2. Connect the oscilloscope to TP8502 for CH1 and TP3307 for CH2.
3. Place the deck in the JOG mode.
4. Rotate the JOG DIAL so that the high period of TP8502 becomes longest as shown in Figure E14-A.
5. Adjust VR3008 so that the L CH and L' CH frequency responses become same characteristics as shown in Figure E14-A.

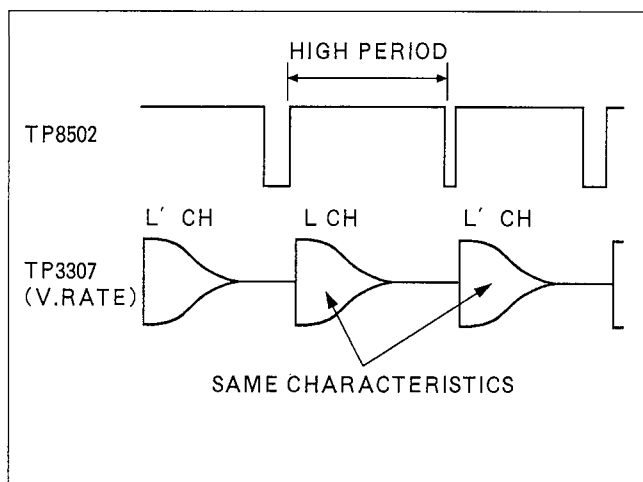


Figure E14-A

6. Rotate the JOG DIAL so that the low period of TP8502 becomes longest as shown in Figure E14-B.
7. Adjust VR3009 so that the R CH and R' CH frequency responses become same characteristics as shown in Figure E14-B.

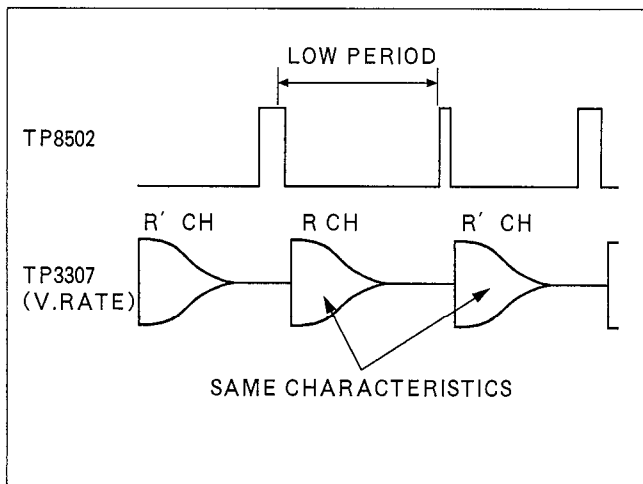


Figure E14-B



### 7-5-5. VHS EQUALIZER ADJ.

#### ◀ NOTE ▶

This adjustment should be performed only after completion of 7-5-3. S-VHS Normal Equalizer Adj.  
When you record the 30% video sweep signal, set the IMAGE MODE SELECT to EDIT.

BOARD	VIDEO I/O C.B.A. (E5)
TP	TP3307 (B-1)
ADJ.	VR3007 (E-1)
TAPE	30% VIDEO SWEEP (B/W) SIGNAL SELF RECORDED TAPE (VHS)
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	100KHz : 2MHz = 5 : 3.5 ± 0.5

#### ◀ SET UP ▶

IMAGE MODE SELECT : EDIT (MENU NO.2001)  
VIDEO MODE : B/W (MENU NO.2002)  
S-VHS REC : OFF (MENU NO.2006)  
VIDEO LEVEL control : PUSH (AGC : ON)  
INPUT SW : S-VIDEO

1. Play back the 30% sweep signal (Figure E13-A) self recorded tape by VHS mode. (Vary the vertical scope setting until the 100KHz level reaches 5 divisions)
2. Connect the oscilloscope to TP3307.
3. Adjust VR3007 so that the level becomes as shown in Figure E15.

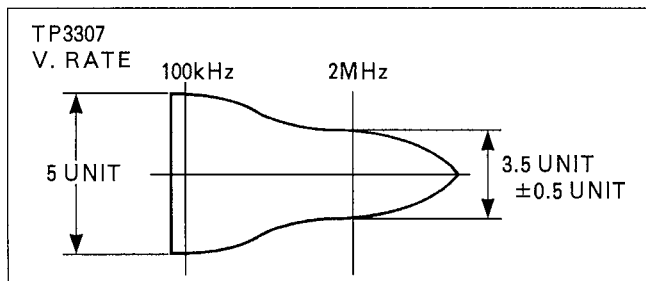


Figure E15

### 7-5-6. VIDEO TRACKING METER ADJ.

BOARD	VIDEO I/O C.B.A. (E5)
TP	VIDEO TRACKING METER
ADJ.	VR3014 (E-1)
TAPE	C.B. SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	
SPEC.	REFER TO FIG. E16

#### ◀ SET UP ▶

S-VHS REC : ON (MENU NO.2006)  
VIDEO LEVEL control : PUSH (AGC : ON)  
CH2 METER SW : VIDEO • TRACKING

1. Play back the color bar signal self recorded tape by S-VHS mode.
2. Adjust VR3014 so that the needle of VIDEO TRACKING METER becomes at point as shown in Figure E16.

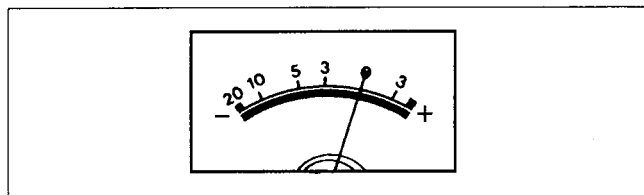


Figure E16

### 7-6. TBC SECTION

#### 7-6-1. Y A/D INPUT (1) ADJ.

BOARD	TBC (1) C.B.A. (E11)
TP	TP8201 (B-1)
ADJ.	VR8202 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	1.5V ± 0.05V

#### ◀ SET UP ▶

VIDEO MODE : COLOR (MENU NO.2002)  
PB/EE SELECT : EE (MENU NO.2004)  
INPUT SW : LINE

1. Connect the oscilloscope to TP8201.
2. Adjust VR8202 so that the level becomes 1.5V ± 0.05V as shown in Figure E17.

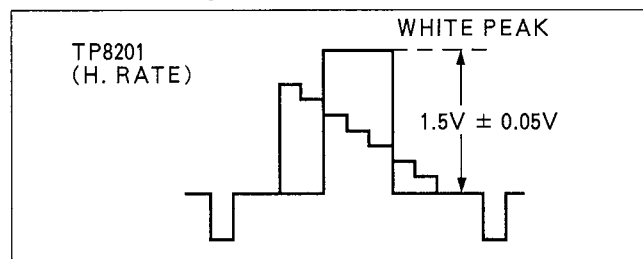


Figure E17

#### 7-6-2. Y A/D INPUT (2) ADJ.

BOARD	TBC (1) C.B.A. (E11)
TP	VIDEO OUT
ADJ.	VR8201 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	0mV ± 10mV



### ◀ SET UP ▶

TBC CONTROL : CENTER POSITION (OSD)  
 VIDEO MODE : COLOR (MENU NO.2002)  
 PB/EE SELECT : EE (MENU NO.2004)  
 INPUT SW : LINE

1. Connect the oscilloscope to VIDEO OUT.
2. Adjust VR8201 so that the set-up level becomes  $0\text{mV} \pm 10\text{mV}$  as shown in Figure E18.

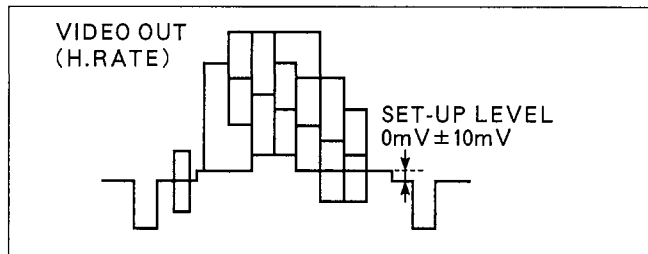


Figure E18

### 7-6-3. Y OUTPUT LEVEL ADJ.

<b>BOARD</b>	TBC (2) C.B.A. (E12)
<b>TP</b>	VIDEO OUT ( $75\Omega$ )
<b>ADJ.</b>	VR8804 (F-2)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	$0.734\text{Vp-p} \pm 0.05\text{Vp-p}$

### ◀ NOTE ▶

VIDEO OUT should be  $75\Omega$  terminated.

### ◀ SET UP ▶

TBC CONTROL : CENTER POSITION (OSD)  
 VIDEO MODE : COLOR (MENU NO.2002)  
 PB/EE SELECT : EE (MENU NO.2004)  
 INPUT SW : LINE

1. Connect the oscilloscope to VIDEO OUT.
2. Adjust VR8804 so that the Y level becomes  $0.734\text{Vp-p} \pm 0.05\text{Vp-p}$  as shown in Figure E19.

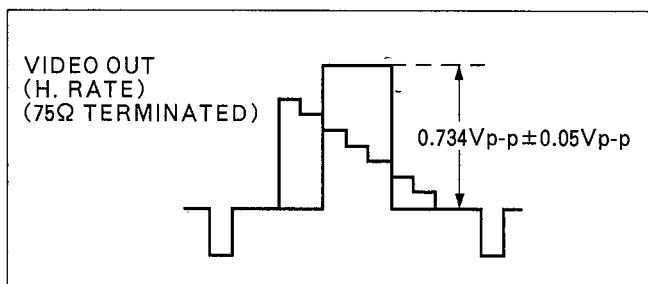


Figure E19

### 7-6-4. SYNC LEVEL ADJ.

### ◀ NOTE ▶

This adjustment should be performed only after completion of 7-6-3. Y Output Level Adj.  
 VIDEO OUT should be  $75\Omega$  terminated.

<b>BOARD</b>	TBC (2) C.B.A. (E12)
<b>TP</b>	VIDEO OUT ( $75\Omega$ )
<b>ADJ.</b>	VR8803 (F-2)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	$0.286\text{Vp-p} \pm 0.03\text{Vp-p}$

### ◀ SET UP ▶

TBC CONTROL : CENTER POSITION (OSD)  
 VIDEO MODE : COLOR (MENU NO.2002)  
 PB/EE SELECT : EE (MENU NO.2004)  
 VIDEO LEVEL control : PUSH (AGC : ON)  
 INPUT SW : LINE

1. Connect the oscilloscope to VIDEO OUT.
2. Adjust VR8804 so that the SYNC level becomes  $0.286\text{Vp-p} \pm 0.03\text{V}$  as shown in Figure E20.

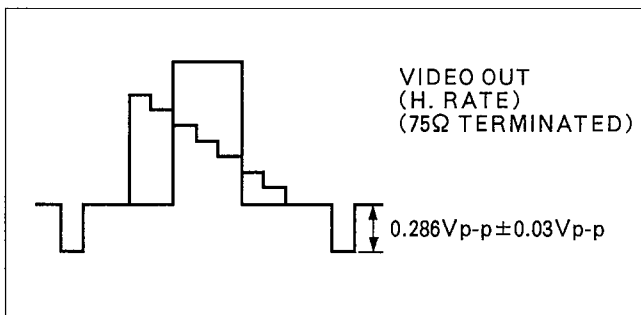


Figure E20



**7-6-5. C A/D INPUT (1) ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	TP8202 (R)(A-1), TP8203 (B)(A-1)
<b>ADJ.</b>	VR8204 (R-Y)(B-1), VR8205 (B-Y)(B-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	1.5Vp-p $\pm$ 0.05Vp-p

**◀ SET UP ▶**

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

INPUT SW : LINE

1. Connect the oscilloscope to TP8202.
2. Adjust VR8204 so that the level becomes 1.5Vp-p  $\pm$  0.05Vp-p as shown in Figure E21-A.

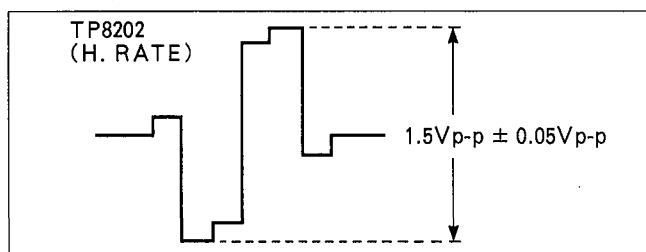


Figure E21-A

3. Connect the oscilloscope to TP8203.
4. Adjust VR8205 so that the level becomes 1.5Vp-p  $\pm$  0.05Vp-p as shown in Figure E21-B.

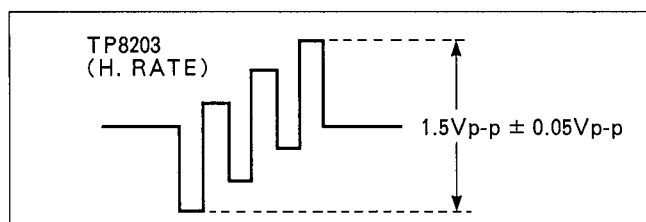


Figure E21-B

**7-6-6. C AD OUTPUT LEVEL ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	TP8051 (E-3)
<b>ADJ.</b>	VR8002 (F-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	V.T.V.M. or D.V.M.
<b>SPEC.</b>	3.5V $\pm$ 0.05V

**◀ SET UP ▶**

TBC CONTROL : CENTER POSITION (OSD)

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

1. Connect the V.T.V.M. or D.V.M. to TP8051.
2. Adjust VR8002 so that the DC voltage becomes 3.5V  $\pm$  0.05V.

**7-6-7. C A/D INPUT (2) ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	COMPONENT OUT (PB, PR)
<b>ADJ.</b>	VR8203 (B-1), VR8302 (F-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	0mV $\pm$ 10mV

**◀ SET UP ▶**

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

INPUT SW : LINE

1. Connect the W.F.M. to Component PR OUT.
2. Adjust VR8203 so that the level becomes minimum (0mV  $\pm$  10mV) as shown in Figure E22-A.

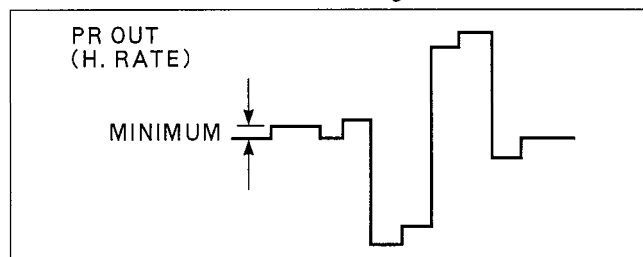


Figure E22-A

3. Connect the W.F.M. to Component PB OUT.
4. Adjust VR8302 so that the level becomes minimum (0mV  $\pm$  10mV) as shown in Figure E22-B.

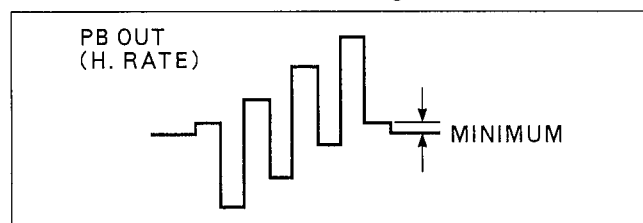


Figure E22-B

**7-6-8. E-E CHROMA ADJ.**

<b>BOARD</b>	VIDEO C C.B.A. (E13)
<b>TP</b>	COMPONENT OUT (PB, PR)(75Ω)
<b>ADJ.</b>	VR9401 (A-1), VR8810 (F-1), VR8811 (F-1) : TBC (2) C.B.A.
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	FIG. E23-A, B, C



# ≪ NOTE ≫

VIDEO OUT should be 75Ω terminated.

# ≪ SET UP ≫

TBC CONTROL : CENTER POSITION.(OSD)  
IMAGE MODE SELECT : EDIT (MENU NO.2001)  
VIDEO MODE : COLOR (MENU NO.2002)  
DNR : OFF  
INPUT SW : LINE  
VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the W.F.M. to Component PB OUT.
2. Adjust VR9401 so that the waveform becomes as shown in Figure E23-A.

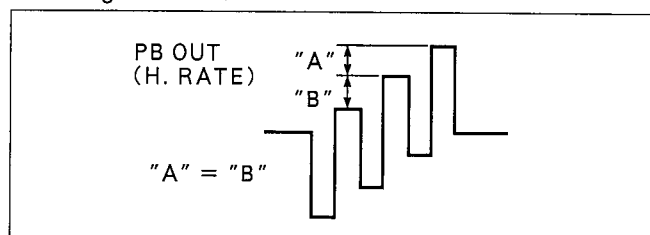


Figure E23-A

3. Adjust VR8810 so that the level becomes 0.486Vp-p ± 0.05Vp-p as shown in Figure E23-B.

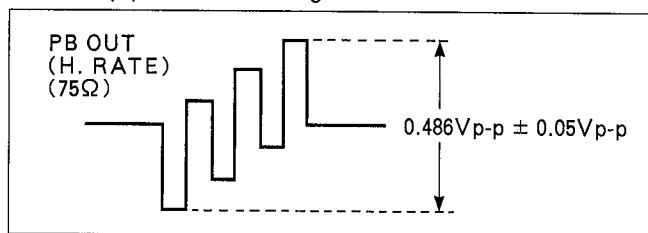


Figure E23-B

4. Connect the W.F.M. to Component PR out.
5. Adjust VR8811 so that the level becomes 0.486Vp-p ± 0.05Vp-p as shown in Figure E23-C.

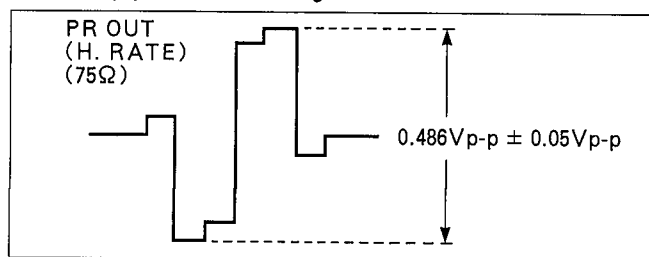


Figure E23-C

## 7-6-9. CAC PR LEVEL ADJ.

BOARD	VIDEO C C.B.A. (E13)
TP	COMPONENT PR OUT
ADJ.	VR9407 (B-1)
TAPE	C.B. SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	B = A ± 2%

# ≪ SET UP ≫

VIDEO MODE : COLOR (MENU NO.2002)  
DNR : OFF  
INPUT SW : S-VIDEO  
VIDEO LEVEL control : PUSH (AGC : ON)

1. Play back the color bar signal (S-VIDEO) self recorded tape by S-VHS mode.
2. Connect the W.F.M. to Component PR OUT.
3. Adjust VR9407 so that the levels "A" and "B" become the same at the EDIT mode and NORMAL mode (change the IMAGE MODE SELECT (MENU NO.2001)) as shown in Figure E24.

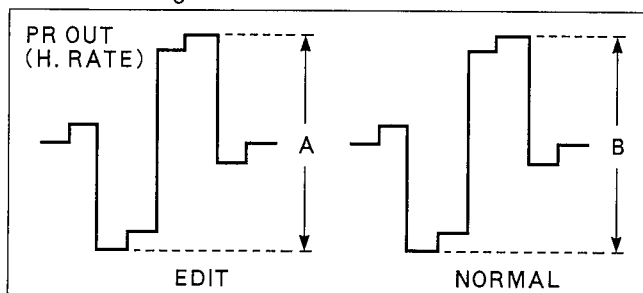


Figure E24

## 7-6-10. CAC PB LEVEL ADJ.

BOARD	VIDEO C C.B.A. (E13)
TP	COMPONENT PB OUT
ADJ.	VR9406 (C-1)
TAPE	C.B. SELF RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	B = A ± 2%

# ≪ SET UP ≫

VIDEO MODE : COLOR (MENU NO.2002)  
DNR : OFF  
INPUT SW : S-VIDEO  
VIDEO LEVEL control : PUSH (AGC : ON)

1. Play back the color bar signal (S-VIDEO) self recorded tape by S-VHS mode.
2. Connect the W.F.M. to Component PB OUT.
3. Adjust VR9406 so that the levels "A" and "B" become the same at the EDIT mode and NORMAL mode (change the IMAGE MODE SELECT (MENU NO.2001)) as shown in Figure E25.

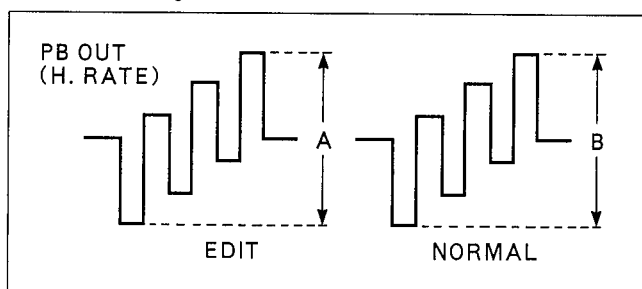


Figure E25



**7-6-11. EDIT CHROMA ADJ.****⏏ NOTE ⏏**

This adjustment should be performed only after completion of 7-6-8. E-E Chroma Adj.

<b>BOARD</b>	VIDEO C C.B.A. (E13)
<b>TP</b>	COMPONENT PB OUT (75Ω)
<b>ADJ.</b>	VR9405 (B-1), VR9410 (A-1)
<b>TAPE</b>	C.B. SELF RECORDED TAPE (S-VHS)
<b>INPUT</b>	
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	FIG. E26-A, B

**⏏ SET UP ⏏**

IMAGE MODE SELECT : EDIT (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

DNR : OFF

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Play back the color bar signal self recorded tape by S-VHS mode.
2. Connect the W.F.M. to Component PB OUT.
3. Adjust VR9410 so that the waveform become as shown in Figure E26-A.

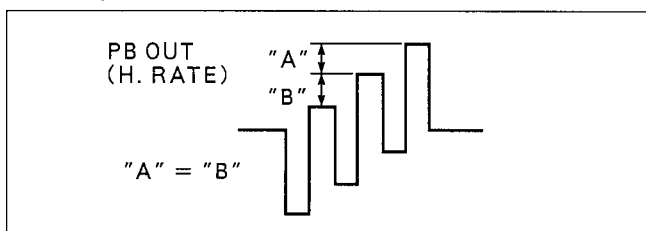


Figure E26-A

4. Adjust VR9405 so that the level becomes  $0.486\text{Vp-p} \pm 0.05\text{Vp-p}$  as shown in Figure E26-B.

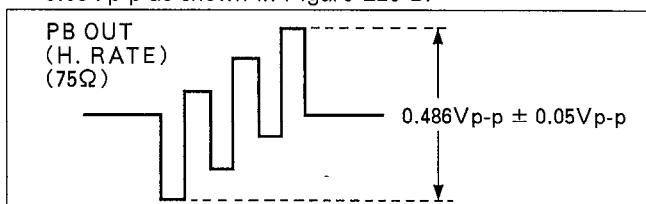


Figure E26-B

**7-6-12. NORMAL CHROMA ADJ.**

<b>BOARD</b>	VIDEO C C.B.A. (E13)
<b>TP</b>	COMPONENT OUT (PB, PR)(75Ω)
<b>ADJ.</b>	VR9406 (C-1), VR9407 (B-1)
<b>TAPE</b>	C.B. SELF RECORDED TAPE (S-VHS)
<b>INPUT</b>	
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	FIG. E27-A, B

**⏏ NOTE ⏏**

This adjustment should be performed only after completion of 7-6-8. E-E Chroma Adj and 7-6-11. Edit Chroma Adj.

**⏏ SET UP ⏏**

IMAGE MODE SELECT : NORMAL (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

DNR : OFF

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Play back the color bar signal self recorded tape by S-VHS mode.
2. Connect the W.F.M. to Component PB OUT.
3. Adjust VR9406 so that the level becomes  $0.486\text{Vp-p} \pm 0.05\text{Vp-p}$  as shown in Figure E27-A.



Figure E27-A

4. Connect the W.F.M. to Component PR OUT.
5. Adjust VR9407 so that the level becomes  $0.486\text{Vp-p} \pm 0.05\text{Vp-p}$  as shown in Figure E27-B.

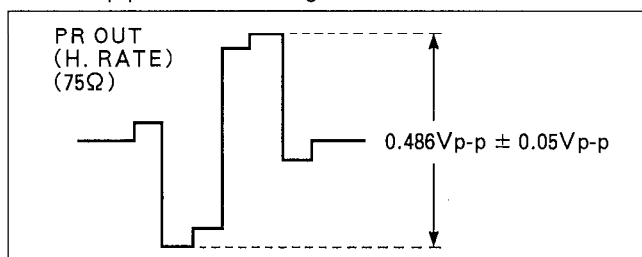


Figure E27-B

**7-6-13. CARRIER BALANCE ADJ.**

<b>BOARD</b>	TBC (2) C.B.A. (E12)
<b>TP</b>	VIDEO OUT (75Ω)
<b>ADJ.</b>	VR8807 (E-1), VR8808 (E-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	VECTORSCOPE
<b>SPEC.</b>	FIG. E28

**⏏ NOTE ⏏**

VIDEO OUT should be 75Ω terminated.

**⏏ SET UP ⏏**

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the vectorscope to VIDEO OUT and adjust VR8807 and VR8808 so that the point "C" becomes center of the vector scope as shown in Figure E28.



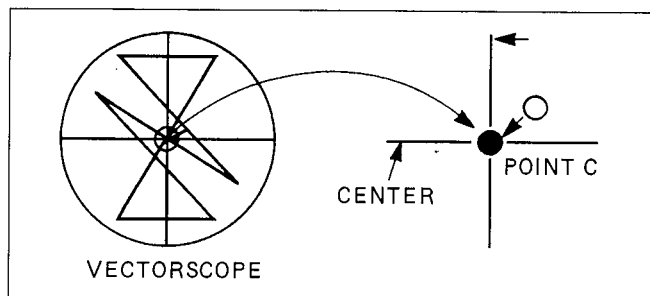


Figure E28

### 7-6-14. BURST LEVEL ADJ.

#### « NOTE »

This adjustment should be performed only after completion of 7-6-13. Carrier Balance Adj.

VIDEO OUT should be 75 $\Omega$  terminated.

BOARD	TBC (2) C.B.A. (E12)
TP	VIDEO OUT (75 $\Omega$ )
ADJ.	VR8806 (E-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	VECTORSCOPE
SPEC.	FIG. E29

#### « SET UP »

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the vectorscope to VIDEO OUT.
2. Adjust VR8806 that the burst signal becomes 75% (180°) as shown in Figure E29.

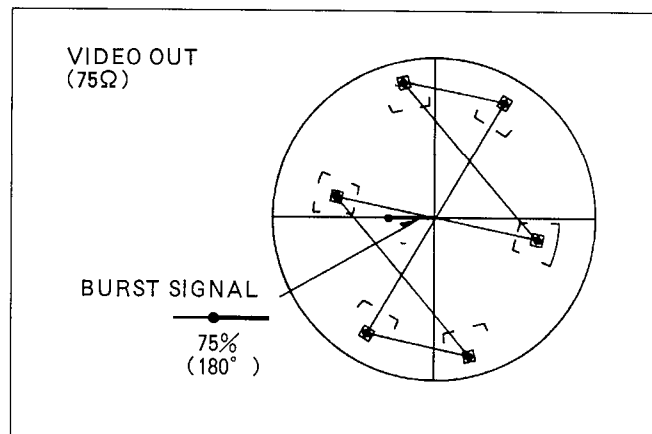


Figure E29

### 7-6-15. CHROMA VECTOR BALANCE ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	VIDEO OUT (75 $\Omega$ )
ADJ.	VR8801 (E-1), VR8802 (E-1), VR8815 (D-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	VECTORSCOPE
SPEC.	FIG. E30

#### « NOTE »

VIDEO OUT should be 75 $\Omega$  terminated.

#### « SET UP »

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the vectorscope to VIDEO OUT.
2. Adjust VR8801, VR8802 and VR8815 so that the all vectors except burst phase become correct position as shown in Figure E30.

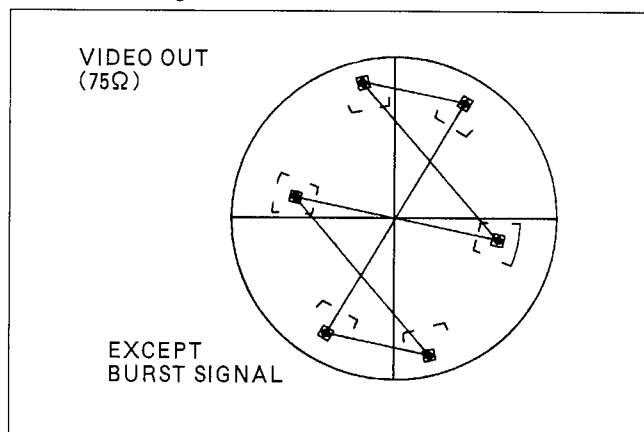


Figure E30



**7-6-16. BURST PHASE ADJ.**

<b>BOARD</b>	TBC (2) C.B.A. (E12)
<b>TP</b>	VIDEO OUT (75Ω)
<b>ADJ.</b>	VR8814 (D-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	VECTORSCOPE
<b>SPEC.</b>	FIG. E31

**« NOTE »**

VIDEO OUT should be 75Ω terminated.

**« SET UP »**

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the vectorscope to VIDEO OUT.
2. Adjust the vectorscope so that the burst signal becomes 75% (180°).
3. Adjust VR8814 so that the all vectors become correct position as shown in Figure E31.

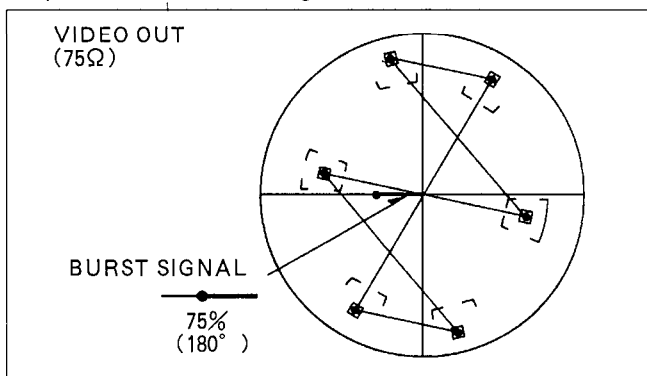


Figure E31

**7-6-17. BURST POSITION ADJ.**

<b>BOARD</b>	TBC (2) C.B.A. (E12)
<b>TP</b>	VIDEO OUT (75Ω)
<b>ADJ.</b>	VR8805 (D-1)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	5.3 μsec ± 0.1 μsec

**« NOTE »**

VIDEO OUT should be 75Ω terminated.

**« SET UP »**

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the W.F.M. to VIDEO OUT.
2. Adjust VR8805 so that the period of H. Sync (down edge) to Burst signal (Burst start point) becomes 5.3 μsec. ± 0.1 μsec. as shown in Figure E32.

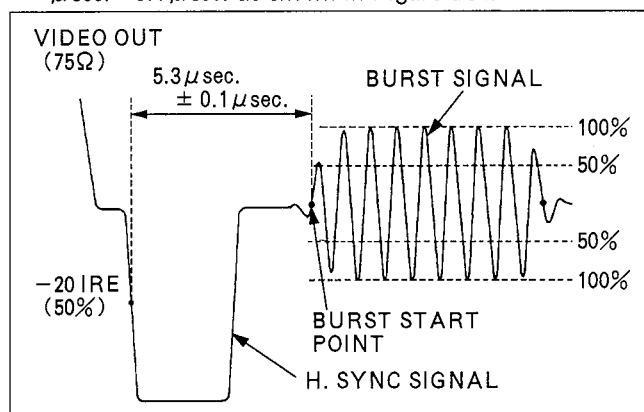


Figure E32

**7-6-18. Y/C TIMING ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	VIDEO OUT (75Ω)
<b>ADJ.</b>	VR8103 (C-1)
<b>TAPE</b>	
<b>INPUT</b>	SIN <sup>2</sup> PULSE & BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	W.F.M. or OSCILLOSCOPE
<b>SPEC.</b>	0nsec ± 50nsec

**« NOTE »**

VIDEO OUT should be 75Ω terminated.

**« SET UP »**

TBC CONTROL : CENTER POSITION

VIDEO MODE : COLOR (MENU NO.2002)

INPUT SW : LINE

1. Connect the oscilloscope (W.F.M.) to VIDEO OUT and expanded the "A" portion as shown in Figure E33-A.

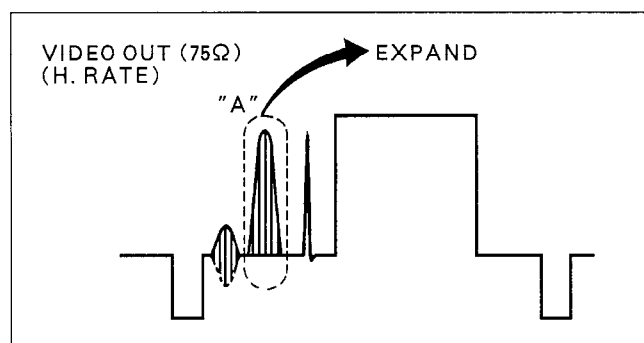


Figure E33-A

2. Adjust VR8103 so that the waveform becomes as shown in Figure E33-B.



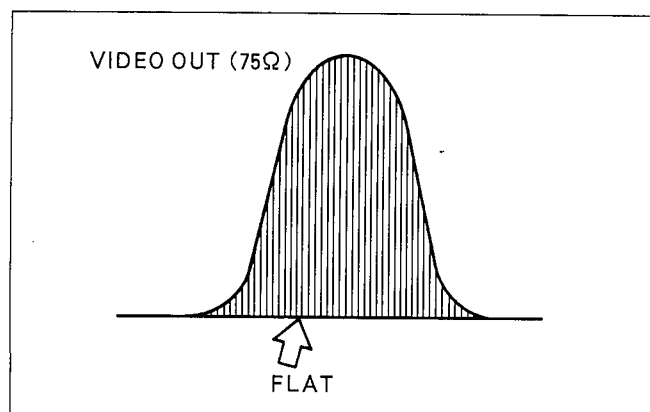


Figure E33-B

### 7-6-19. PB S-VHS Y/C DELAY ADJ.

BOARD	VIDEO I/O C.B.A. (E10)
TP	VIDEO OUT
ADJ.	VR3205 (E-3)
TAPE	SIN <sup>2</sup> PULSE & BAR SIGNAL OTHE RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	100nsec $\pm$ 50nsec (FIG. E34)

#### « SET UP »

IMAGE MODE SELECT : EDIT (MENU NO.2001)  
VIDEO MODE : COLOR (MENU NO.2002)

1. Connect the oscilloscope (W.F.M.) to VIDEO OUT and expanded the "A" portion as shown in Figure E33-A.
2. Play back the SIN<sup>2</sup> PULSE & BAR signal other recorded tape by S-VHS mode.
3. Adjust VR3205 so that the waveform becomes as shown in Figure E34.

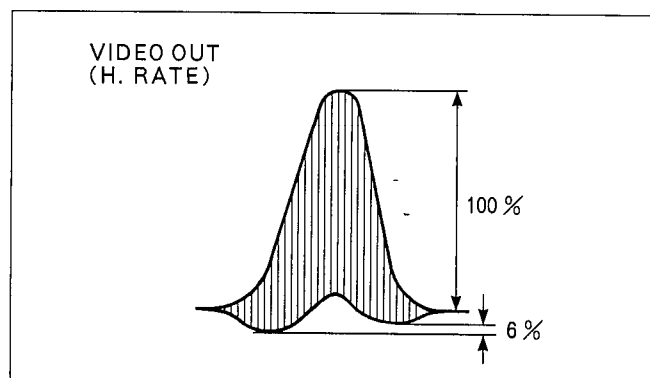


Figure E34

### 7-6-20. PB VHS Y/C DELAY ADJ.

BOARD	VIDEO I/O C.B.A. (E10)
TP	VIDEO OUT
ADJ.	VR3204 (E-3)
TAPE	SIN <sup>2</sup> PULSE & BAR SIGNAL OTHE RECORDED TAPE (VHS)
INPUT	
MODE	PLAYBACK
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	100nsec $\pm$ 50nsec (FIG. E34)

#### « SET UP »

IMAGE MODE SELECT : EDIT (MENU NO.2001)  
VIDEO MODE : COLOR (MENU NO.2002)

1. Connect the oscilloscope (W.F.M.) to VIDEO OUT and expanded the "A" portion as shown in Figure E33-A.
2. Play back the SIN<sup>2</sup> PULSE & BAR signal other recorded tape by VHS mode.
3. Adjust VR3204 so that the waveform becomes as shown in Figure E34.

### 7-6-21. NORMAL Y/C TIMING ADJ.

#### « NOTE »

*This adjustment should be performed only after completion of 7-6-18. Y/C Timing Adj., 7-6-19. PB S-VHS Y/C Delay Adj. and 7-6-20. PB VHS Y/C Delay Adj.*

BOARD	VIDEO C C.B.A. (E13)
TP	VIDEO OUT
ADJ.	VR9403 (C-1), SW3921 (A-1)(DIGITAL C.B.A)
TAPE	SIN <sup>2</sup> PULSE & BAR SIGNAL OTHE RECORDED TAPE (S-VHS)
INPUT	
MODE	PLAYBACK
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	100nsec $\pm$ 50nsec (FIG. E34)

#### « SET UP »

TBC CONTROL : CENTER POSITION  
IMAGE MODE SELECT : NORMAL (MENU NO.2001)  
VIDEO MODE : COLOR (MENU NO.2002)  
DNR : OFF  
VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect a jumper wire between TP9405 and TPG9406.
2. Connect the oscilloscope (W.F.M.) to VIDEO OUT and expanded the "A" portion as shown in Figure E33-A.
3. Play back the SIN<sup>2</sup> PULSE & BAR signal other recorded tape by S-VHS mode.
4. Adjust VR9403 and SW3921 so that the waveform becomes as shown in Figure E34.



**7-6-22. CAC Y/C TIMING ADJ.****≪ NOTE ≫**

*This adjustment should be performed only after completion of 7-6-18. Y/C Timing Adj., 7-6-19. PB S-VHS Y/C Delay Adj. and 7-6-20. PB VHS Y/C Delay Adj.*

<b>BOARD</b>	VIDEO C.C.B.A. (E13)
<b>TP</b>	TP9407 (C-2), TP9404 (B-1)
<b>ADJ.</b>	VR9402 (C-1)
<b>TAPE</b>	SIN <sup>2</sup> PULSE & BAR SIGNAL OTHER RECORDED TAPE (S-VHS)
<b>INPUT</b>	
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	70nsec ± 35nsec (FIG. E35)

**≪ SET UP ≫**

TBC CONTROL : CENTER POSITION  
 IMAGE MODE SELECT : NORMAL (MENU NO.2001)  
 VIDEO MODE : COLOR (MENU NO.2002)  
 DNR : OFF  
 VIDEO LEVEL control : PUSH (AGC : ON)

1. Connect the oscilloscope to TP9407 for CH1 and TP9404 for CH2.
2. Set the vertical scope setting of both the channels (CH1 and CH2) to the same range.
3. Set the scope to ADD (CH1+CH2) mode.
4. Play back the SIN<sup>2</sup> PULSE & BAR signal other recorded tape by S-VHS mode.
5. Adjust VR9402 so that the waveform becomes as shown in Figure E35.

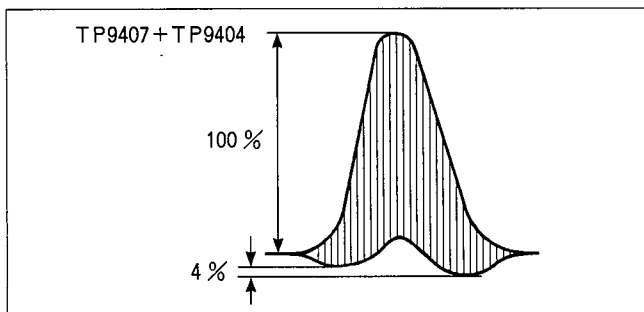


Figure E35

**7-6-23. Y CLOCK PHASE ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	TP8101 (C-3)
<b>ADJ.</b>	VR8101 (C-3)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	A=45±5

**≪ SET UP ≫**

INPUT SELECT : LINE

1. Connect the oscilloscope to TP8101.
2. Adjust VR8101 so that the waveform becomes as shown in Figure E36.

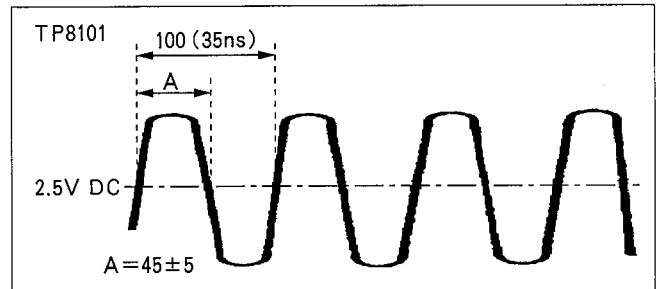


Figure E36

**7-6-24. PLL LOCK ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	TP8105 (B-2), TP8103 (C-2)
<b>ADJ.</b>	VC8101 (B-3)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	840nsec ± 20nsec (FIG. E37)

**≪ SET UP ≫**

INPUT SELECT : LINE

1. Connect the oscilloscope to TP8105 for CH1 and TP8103 for CH2.
2. Adjust VC8101 so that the "T" becomes 840nsec. ± 20 nsec. as shown in Figure E37.

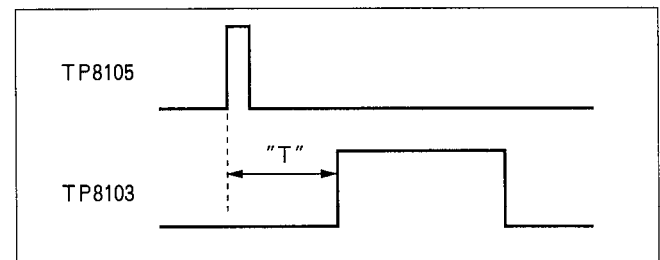


Figure E37

**7-6-25. C CLOCK PHASE ADJ.**

<b>BOARD</b>	TBC (1) C.B.A. (E11)
<b>TP</b>	TP8301 (C-3)
<b>ADJ.</b>	VR8301 (B-3)
<b>TAPE</b>	
<b>INPUT</b>	COLOR BAR SIGNAL (LINE)
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	A=45±5



# « SET UP »

INPUT SELECT : LINE

1. Connect a scope to TP8301.
2. Adjust VR8301 so that the waveform becomes as shown in Figure E36.

## 7-6-26. HEAD SWITCH ADJ.

BOARD	TBC (1) C.B.A. (E11)
TP	TP41003 (G-1: AUDIO(2)), TP8501 (F-1)
ADJ.	VR8501 (E-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	REC
M. EQ	OSCILLOSCOPE
SPEC.	$T = 32.5 \mu\text{sec} \pm 2.5 \mu\text{sec}$ (FIG. E38)

# « SET UP »

INPUT SELECT : LINE

1. Connect a scope to TP41003 for CH-1 and TP8501 for CH-2.
2. Adjust VR8501 so that the "T" becomes  $32.5 \mu\text{sec} \pm 2.5 \mu\text{sec}$  as shown in Figure E38.

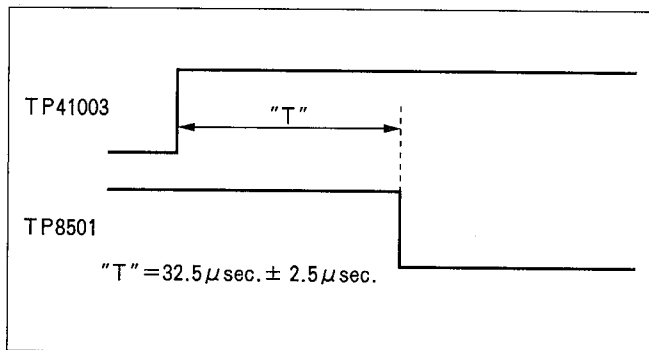


Figure E38-A

# « NOTE »

You can adjust more easy by using the ADD (CH1 & CH2) feature on a scope as shown in Figure E-38-B

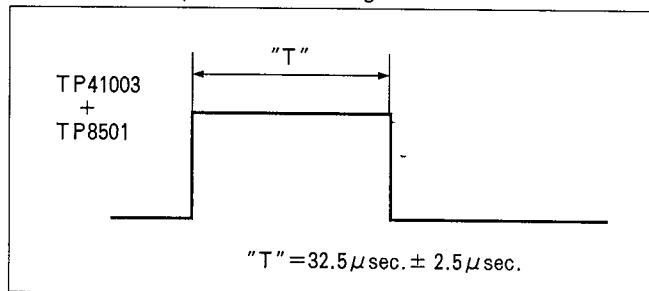


Figure E38-B

## 7-6-27. S/H ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	TP8603 (A-4), TP8604 (B-1)
ADJ.	VR8601 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (REF. IN)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	$A = B \pm 10\%$

# « SET UP »

INPUT SELECT : LINE

1. Supply a color bar signal to the REF. IN.
2. Connect a scope to TP8603 for CH-1 and TP8604 for CH-2.
3. Adjust VR8601 so that the position of S/H pulse (TP8604) becomes as shown in Figure E39.

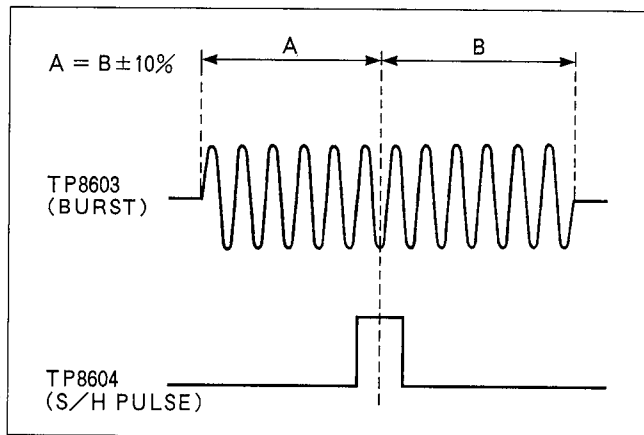


Figure E39

## 7-6-28. 14.3MHz VCO ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	TP8609 (C-2)
ADJ.	VC8671 (A-2)
TAPE	
INPUT	NO SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	FREQUENCY COUNTER
SPEC.	$f = 3,579,545\text{Hz} \pm 5\text{Hz}$

# « SET UP »

INPUT SELECT : LINE

1. Connect a counter to TP8609.
2. Adjust VC8671 so that the frequency becomes  $3,579,545\text{Hz} \pm 5\text{Hz}$ .



## 7-6-29. REF. SCH ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	TP8609 (C-2), TP8610 (C-2)
ADJ.	VR8603 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (REF. & LINE)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	A = B ± 10%

### ≪ NOTE ≫

SCH of a color bar signal (REF. & LINE) should be 0°.

### ≪ SET UP ≫

INPUT SELECT : LINE

1. Connect a scope to TP8609 for CH1 and TP8610 for CH2.
2. Adjust VR8603 so that the up edge of H pulse becomes as shown in Figure E40.

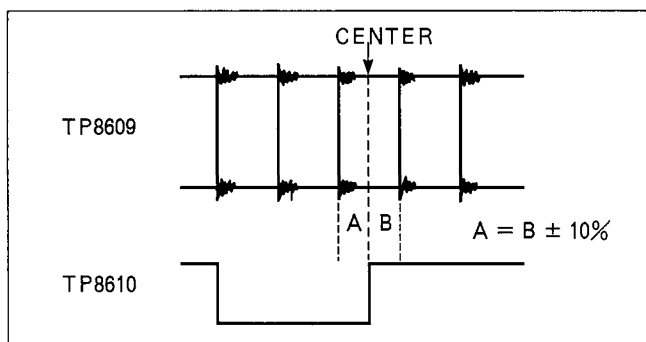


Figure E40

## 7-6-30. SCH PHASE ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	VIDEO OUT (75Ω)
ADJ.	SW8701 (C-1), VR8602 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (REF. & LINE)
MODE	EJECT (E-E)
M. EQ	SCH METER
SPEC.	0 ± 2°

### ≪ NOTE ≫

VIDEO OUT should be 75Ω terminated.

SCH of a color bar signal (REF. & LINE) should be 0°.

Trigger of SCH METER should be EXT.

### ≪ SET UP ≫

VIDEO MODE : COLOR (MENU NO.2002)

PB/EE SELECT : EE (MENU NO.2004)

INPUT SW : LINE

1. Connect a SCH Meter as shown in Figure E41-A.
2. Adjust SW8701 and VR8602 so that the SCH phase becomes 0° ± 2° as shown in Figure E41-B.

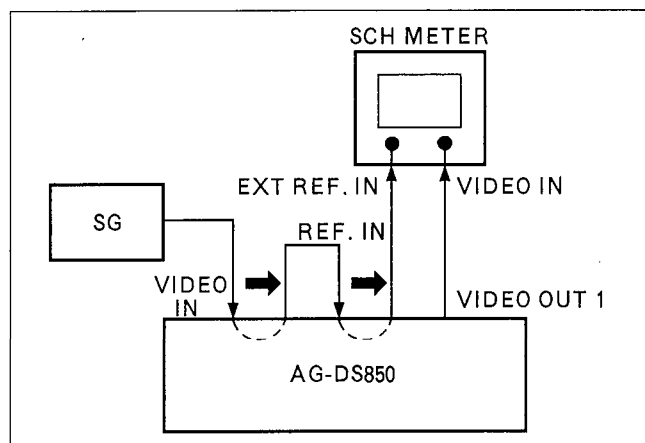


Figure E41-A

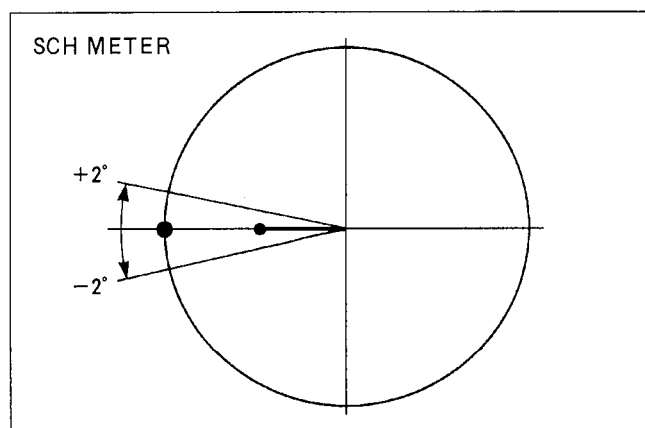


Figure E41-B

## 7-6-31. SYSTEM H PHASE ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	REF VIDEO, VIDEO OUT (75Ω)
ADJ.	VR8701 (B-1)
TAPE	
INPUT	COLOR BAR SIGNAL (REF.)
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	FIG. E42-B

### ≪ NOTE ≫

VIDEO OUT should be 75Ω terminated.

SCH of color bar signal (REF. ) should be 0°.

### ≪ SET UP ≫

VIDEO MODE : COLOR (MENU NO.2002)

TBC CONTROL (SYSTEM H PHASE) : CENTER (OSD)

INPUT SW : LINE

1. Connect a scope as shown in Figure E42-A.
2. Adjust VR8701 so that the H phase of these signals are the same as shown in Figure E42-B.



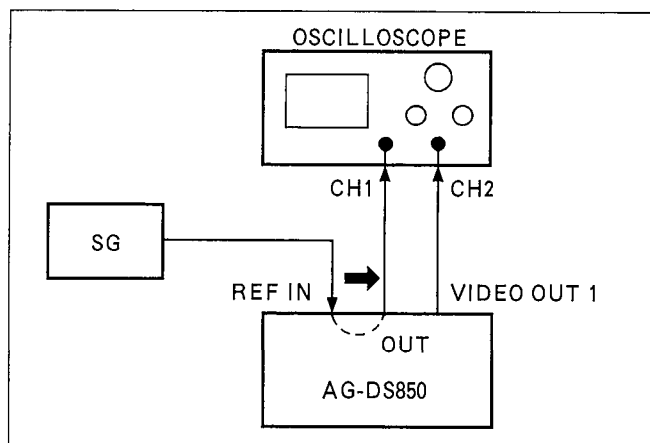


Figure E42-A

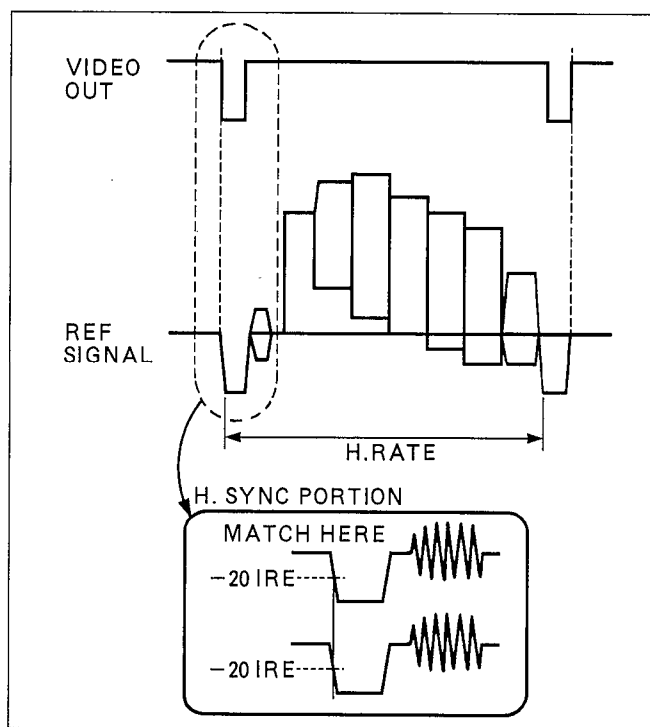


Figure E42-B

### 7-6-32. VIDEO PHASE ADJ.

BOARD	TBC (1) C.B.A. (E-11)
TP	VIDEO OUT (75Ω)
ADJ.	VR8102 (C-1)
TAPE	
INPUT	COLOR BAR SIGNAL (LINE)
MODE	EJECT (E-E)
M. EQ	W.F.M. or OSCILLOSCOPE
SPEC.	FIG. E43

#### « NOTE »

VIDEO OUT should be 75Ω terminated.

#### « SET UP »

VIDEO MODE : COLOR (MENU NO.2002)  
PB/EE SELECT : EE (MENU NO.2004)  
INPUT SW : LINE

1. Connect the W.F.M. to VIDEO OUT.
2. Adjust VR8102 so that the waveform becomes as shown in Figure E43.

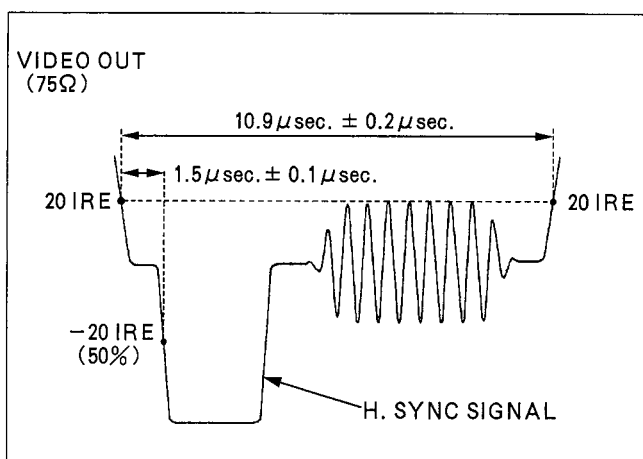


Figure E43

### 7-6-33. SYSTEM SC PHASE ADJ.

BOARD	TBC (2) C.B.A. (E12)
TP	VIDEO OUT (75Ω)
ADJ.	VR8671 (A-1)
TAPE	
INPUT	COLOR BAR SIGNAL (REF. & LINE)
MODE	EJECT (E-E)
M. EQ	SCH METER
SPEC.	0° ± 2°

#### « NOTE »

VIDEO OUT should be 75Ω terminated.

#### « SET UP »

TBC CONTROL : CENTER POSITION  
PB/EE SELECT : EE (MENU NO.2004)  
INPUT SW : LINE

1. Connect the SCH Meter as shown in Figure E41-A.
2. Adjust VR8671 so that the SYSTEM SC PHASE becomes 0° ± 2° as shown in Figure E41-B.
3. If not, adjust the TBC CONTROL (SYSTEM SC COARSE), and repeat step 2.



## 7-7.AUDIO SECTION

Unless otherwise specified, the following connections are used to check the output and input levels from/to the AUDIO OUT and IN jacks (XLR) as shown in Figure E44.

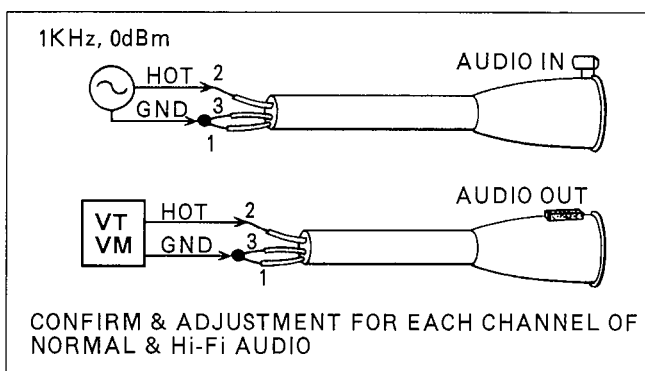


Figure E44

And connect the AG-DS850 and Audio Meter (V.T.V.M. or D.V.M.) in parallel as shown in Figure E45 when you check the level of input signal.

(0dBm = 0.775Vrms = 2.19Vp-p)

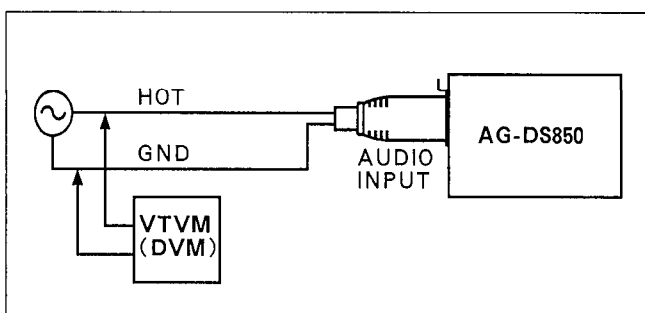


Figure E45

Please note that the Audio Output Level Switch is located on the AUDIO (2) C.B.A. (C-1)

### 7-7-1. NORMAL AUDIO INPUT LEVEL ADJ.

BOARD	AUDIO (1) C.B.A. (E7)
TP	NORM/Hi-Fi AUDIO OUT (CH1/CH2)
ADJ.	VR40011 (CH1)(E-1), VR40012 (CH2)(E-1)
TAPE	
INPUT	1KHz, 0dBm SINE WAVE SIGNAL
MODE	EJECT (E-E)
M. EQ	V.T.V.M. (D.V.M.)
SPEC.	0dBm $\pm$ 0.2dBm

### ◀ SET UP ▶

S-VHS REC : OFF (MENU NO.2006)  
 DOLBY NR : OFF (MENU NO.3001)  
 AUDIO LIMITER : OFF (MENU NO.3002)  
 AUDIO OUT SELECT SW : NORM  
 INPUT AUDIO LEVEL SW (NORM/Hi-Fi) : 0dBs  
 OUTPUT AUDIO LEVEL SW : 0dBs  
 CH1 REC : CH1 (MENU NO.3005)  
 AUDIO CH2 : AUDIO (MENU NO.3006)  
 NORM. AUDIO (CH1/2) LEVEL CONTROL : CENTER

1. Supply a 1KHz, 0dBm sine wave signal to the NORM/Hi-Fi AUDIO (CH1 & CH2) INPUTs.
2. Adjust VR40011 (CH1) and VR40012 (CH2) so that the level becomes 0dBm  $\pm$  0.2dBm.

### 7-7-2. Hi-Fi AUDIO INPUT LEVEL ADJ.

BOARD	AUDIO (2) C.B.A. (E8)
TP	Hi-Fi AUDIO OUT (CH1/CH2)
ADJ.	VR41008 (CH1)(D-1), VR41009 (CH2)(E-1)
TAPE	
INPUT	1KHz, 0dBm SINE WAVE SIGNAL
MODE	EJECT (E-E)
M. EQ	V.T.V.M. (D.V.M.)
SPEC.	0dBm $\pm$ 0.2dBm

### ◀ SET UP ▶

S-VHS REC : OFF (MENU NO.2006)  
 Hi-Fi INPUT SELECT : Hi-Fi INPUT (MENU NO.3004)  
 INPUT AUDIO LEVEL SW (Hi-Fi) : 0dBs  
 OUTPUT AUDIO LEVEL SW : 0dBs  
 Hi-Fi AUDIO (CH1/2) LEVEL CONTROL : CENTER

1. Supply a 1KHz, 0dBm sine wave signal to the Hi-Fi AUDIO (CH1 & CH2) INPUTs.
2. Adjust VR41008 (CH1) and VR41009 (CH2) so that the level becomes 0dBm  $\pm$  0.2dBm.

### 7-7-3. AUDIO JACK OUTPUT BALANCE ADJ.

### ◀ NOTE ▶

This adjustment should be performed only after completion of 7-7-1. Normal Audio Input Level Adj. and 7-7-2. Hi-Fi Audio Input level Adj.

BOARD	REAR AMP C.B.A. (E28)
TP	NORM/Hi-Fi AUDIO OUT (CH1, CH2) Hi-Fi AUDIO OUT (CH1, CH2)
ADJ.	NOR: VR4007(CH1)(C-1), VR4008(CH2)(C-1) Hi-Fi: VR4005(CH1)(C-2), VR4006(CH2)(C-1)
TAPE	
INPUT	1KHz, 0dBm SINE WAVE SIGNAL
MODE	EJECT (E-E)
M. EQ	V.T.V.M.(D.V.M.)
SPEC.	LESS THAN 68mVrms



1. Supply a 1KHz, 0dB sine wave signal to the NORM /Hi-Fi (CH1 & CH2) Audio Inputs.
2. Connect the V.T.V.M.(D.V.M.) to NORM/Hi-Fi AUDIO OUT (CH1/CH2) as shown in Figure E46.
3. Adjust VR4007 (CH1) and VR4008 (CH2) so that the level becomes minimum (less than 68mVrms).
4. Connect the V.T.V.M.(D.V.M.) to the Hi-Fi AUDIO OUT (CH1/CH2) as shown in Figure E46.
5. Adjust VR4005 (CH1) and VR4006 (CH2) so that the level becomes minimum (less than 68mVrms).
6. Perform 7-7-1. Normal Audio Input Level Adj. and/or 7-7-2. Hi-Fi Audio Input Level Adj. again if VR4007 (CH1) VR4008 and/or VR4005 (CH1), VR4006 (CH2) are adjusted.

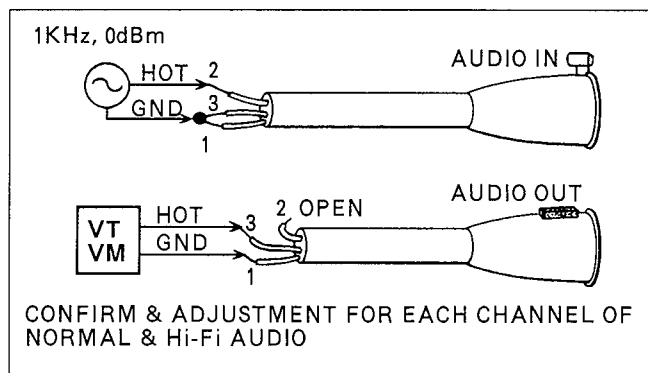


Figure E46

#### 7-7-4. AUDIO LEVEL METER ADJ.

##### « NOTE »

This adjustment should be performed only after completion of 7-7-1. Normal Audio Input Adj.

BOARD	AUDIO (2) C.B.A. (E8)
TP	AUDIO METER (CH1, CH2)
ADJ.	VR41012 (CH1)(B-1), VR41013 (CH2)(B-1)
TAPE	
INPUT	1KHz, 0dBm SINE WAVE SIGNAL
MODE	EJECT (E-E)
M. EQ	
SPEC.	0 ± 0.5

##### « SET UP »

S-VHS REC : ON (MENU NO.2006)  
 DOLBY NR : OFF (MENU NO.3001)  
 AUDIO LIMITER : OFF (MENU NO.3002)  
 Hi-Fi REC : ON (MENU NO.3003)  
 CH1 REC : CH1 (MENU NO.3005)  
 AUDIO CH2 : AUDIO (MENU NO.3006)  
 CH2 METER : AUDIO CH2  
 AUDIO METER SW : NORM  
 INPUT AUDIO LEVEL SW (NORM/Hi-Fi) : 0dBs  
 NORM. AUDIO (CH1/2) LEVEL CONTROL : CENTER

1. Supply a 1KHz, 0dBm sine wave signal to the NORM/Hi-Fi AUDIO (CH1 & CH2) INPUTs.
2. Adjust VR41012 (CH1) and VR41013 (CH2) so that the needle of Audio Level Meter (CH1 & CH2) reaches "0 ± 0.5" as shown in Figure E47.

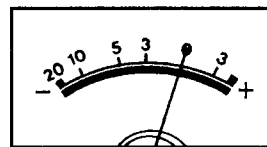


Figure E47

#### 7-7-5. NORMAL AUDIO PLAYBACK FREQUENCY RESPONSE ADJ.

BOARD	AUDIO (1) C.B.A. (E7)
TP	TP40005 (CH1)(G-1), TP40007 (CH2)(E-1)
ADJ.	VR40002 (CH1)(F-1), VR40007 (CH2)(D-1)
TAPE	VFM8080HQFP, PORTION : 5
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	400Hz=5KHz (0dB ± 0.5dB)

##### « NOTE »

After this adjustment is finished, adjust 7-7-6. Normal Audio PB Gain Adj.

##### « SET UP »

DOLBY NR : OFF (MENU NO.3001)  
 AUDIO CH2 : AUDIO (MENU NO.3006)

1. Set the VR40003 and VR40008 to the center position.
2. Play back the alignment tape at portion 5.
3. Connect a oscilloscope to TP40005 and TP40007.
4. Adjust VR40002(CH1) and VR40007(CH2) so that the 400Hz and 5KHz levels become the same (0dBm ± 0.5dBm) as shown in Figure E48.

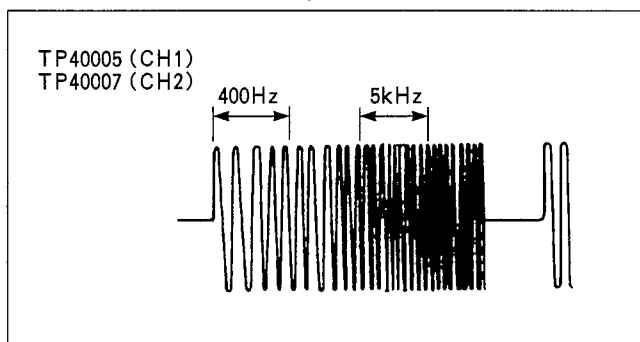


Figure E48



### 7-7-6. NORMAL AUDIO PB GAIN ADJ.

#### « NOTE »

This Adjustment should be performed only after completion of 7-7-5. Normal Audio PB Frequency Response Adj.

BOARD	AUDIO (1) C.B.A. (E7)
TP	TP40005 (CH1)(G-1), TP40007 (CH2)(E-1)
ADJ.	VR40003 (CH1)(F-1), VR40008 (CH2)(D-1)
TAPE	VFM8080HQFP, PORTION : 5
INPUT	
MODE	PLAYBACK
M. EQ	OSCILLOSCOPE
SPEC.	CH1: 300mVp-p $\pm$ 15mVp-p CH2: 310mVp-p $\pm$ 15mVp-p

#### « SET UP »

DOLBY NR : OFF (MENU NO.3001)  
AUDIO CH2 : AUDIO (MENU NO.3006)

1. Connect a scope to TP40005 (CH1) and TP40007 (CH2), and adjust VR40003 (CH1) and VR40008 (CH2) so that the levels become 300mVp-p  $\pm$  15mVp-p (CH1) and 310mVp-p  $\pm$  15mVp-p (CH2) as shown in Figure E49.

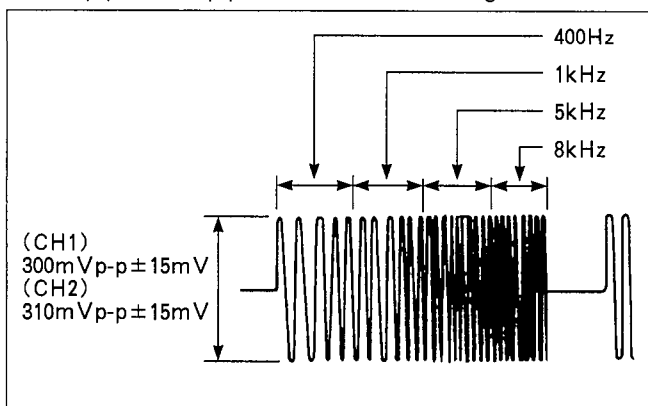


Figure E49

### 7-7-7. NORMAL AUDIO ERASE CURRENT ADJ.

BOARD	AUDIO (1) C.B.A. (E7)
TP	TP40002 (CH1)(A-3), TP40004 (CH2)(E-3)
ADJ.	TL40002 (A-3), TL40003 (CH1)(A-3), TL40004 (CH2)(B-3)
TAPE	BLANK TAPE
INPUT	
MODE	REC
M. EQ	FREQUENCY COUNTER, OSCILLOSCOPE
SPEC.	70KHz $\pm$ 1KHz

#### « SET UP »

S-VHS REC : ON (MENU NO.2006)  
CH1 REC : CH1 (MENU NO.3005)  
AUDIO CH2 : AUDIO (MENU NO.3006)

1. Connect a frequency counter to TP40002 and adjust TL40002 so that the frequency becomes 70KHz  $\pm$  1KHz.
2. Connect the oscilloscope to TP40002 (CH1) and TP40004 (CH2), and adjust TL40003 (CH1) and TL40004 (CH2) so that the level becomes maximum.

### 7-7-8. NORMAL AUDIO BIAS CURRENT ADJ.

BOARD	AUDIO (1) C.B.A. (E7)
TP	A/C HEAD
ADJ.	S-VHS : TL40001 (CH1)(A-2), TL40005 (CH2)(B-2) VHS : VR40004 (CH1)(A-1), VR40009 (CH2)(B-2)
TAPE	VHS, S-VHS BLANK TAPE
INPUT	NO SIGNAL
MODE	REC
M. EQ	V.T.V.M. (D.V.M.)
SPEC.	S-VHS : 6.5mVrms $\pm$ 0.1mVrms VHS : 5.0mVrms $\pm$ 0.1mVrms

#### « SET UP »

S-VHS REC : ON (MENU NO.2006)  
CH1 REC : CH1 (MENU NO.3005)  
AUDIO CH2 : AUDIO (MENU NO.3006)

1. Insert the S-VHS blank tape and place the deck in the REC mode.
2. Connect the V.T.V.M.(D.V.M.) to the A/C Head as shown in Figure E50.
3. Adjust TL40001 (CH1) and TL40005 (CH2) so that the level becomes 6.5mVrms  $\pm$  0.1mVrms.
4. Insert the VHS blank tape and place the deck in the REC mode.
5. Adjust VR40004 (CH1) and VR40009 (CH2) so that the level becomes 5.0mVrms  $\pm$  0.1mVrms.

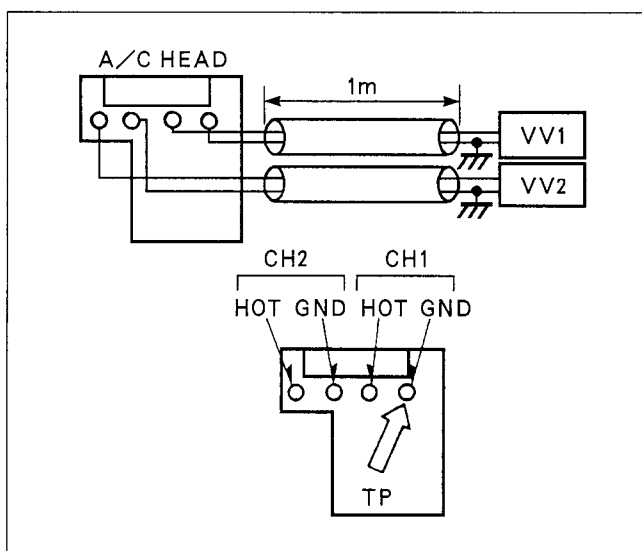


Figure E50



### 7-7-9. NORMAL AUDIO FREQUENCY RESPONSE ADJ.

<b>BOARD</b>	AUDIO (1) C.B.A. (E7)
<b>TP</b>	TP40005 (G-1), TP40007 (E-1)
<b>ADJ.</b>	VHS: J40004 (CH1)(B-1), J40003 (CH2)(C-1) S-VHS: C40053 (CH1)(F-1), C40118 (CH2)(C-2)
<b>TAPE</b>	VHS, S-VHS BLANK TAPE
<b>INPUT</b>	1K, 5K, 8K, 10K -20dBm SINE WAVE SIGNAL
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	V.T.V.M. (D.V.M.)
<b>SPEC.</b>	WITHIN $\pm 2\text{dBm}$

#### ◀ SET UP ▶

S-VHS REC : OFF (MENU NO.2006)  
 AUDIO CH2 : AUDIO (MENU NO.3006)  
 DOLBY NR : OFF (MENU NO.3001)  
 AUDIO LIMITER : OFF (MENU NO.3002)  
 CH1 REC : CH1 (MENU NO.3005)  
 AUDIO CH2 : AUDIO (MENU NO.3006)  
 INPUT AUDIO LEVEL SW (NORM/Hi-Fi) : 0dBs  
 NORM. AUDIO (CH1/2) LEVEL CONTROL : CENTER

- Record -20dBm sine wave signal (1KHz, 5KHz, 8KHz, 10KHz) on both S-VHS and VHS tapes, with the machine in the respective mode.
- Read the level at TP40005 (CH1) and TP40007 (CH2) while playing back the 1KHz section of VHS tape. These are the reference level.
- Play back the 5KHz, 8KHz and 10KHz sections.
- Confirm that these higher frequency playback level match that of the 1KHz level to within  $\pm 2\text{dB}$ .
- If the 8KHz playback level is more than +2dB higher than the 1KHz level, remove jumpers J40004 (CH1) and/or J40003 (CH2).
- Repeat step 2 to 4, playing back the S-VHS tape.
- If the 8KHz playback level is more than +2dB higher than the 1KHz level, remove C40053 (CH1) and/or C40118 (CH2).

### 7-7-10. NORMAL AUDIO TIME CODE METER ADJ.

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	AUDIO LEVEL CH2 METER
<b>ADJ.</b>	VR41014 (A-1)
<b>TAPE</b>	BLANK TAPE
<b>INPUT</b>	TIME CODE SIGNAL (or 300Hz, 1Vp-p sine wave signal)
<b>MODE</b>	REC
<b>M. EQ</b>	
<b>SPEC.</b>	$0 \pm 0.5$

#### ◀ SET UP ▶

S-VHS REC : OFF (MENU NO.2006)  
 AUDIO CH2 : LTC (MENU NO.3006)  
 CH2 METER : AUDIO CH2

- Supply a Time Code Signal (or 300Hz, 1Vp-p sine wave signal) to the TIME CODE IN connector.
- Adjust VR41014 so that needle of Audio level CH2 Meter reaches " $0 \pm 0.5$ " as shown in Figure E51.

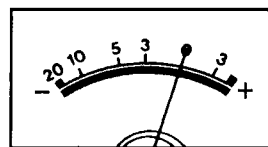


Figure E51

### 7-7-11. Hi-Fi AUDIO HEAD SWITCHING SHIFTER ADJ.

#### ◀ NOTE ▶

*This adjustment should be performed only after completion of 7-3-1. PG Shifter Adj.*

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	TP41004 (F-1), TP41006 (F-1)
<b>ADJ.</b>	VR41004 (G-1)
<b>TAPE</b>	VFM8080HQFP, PORTION : 1
<b>INPUT</b>	
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	OSCILLOSCOPE
<b>SPEC.</b>	FIG. E52

#### ◀ SET UP ▶

S-VHS REC : ON (MENU NO.2006)

- Adjust VR41004 so that disappear the drop-out at the (a) and (b) positions as shown in Figure E52.
- Turn the Tracking VR and then confirm that disappear the drop-out at the (a) and (b) positions.
- If not, repeat the steps 1 and 2 until that disappear the drop-out.

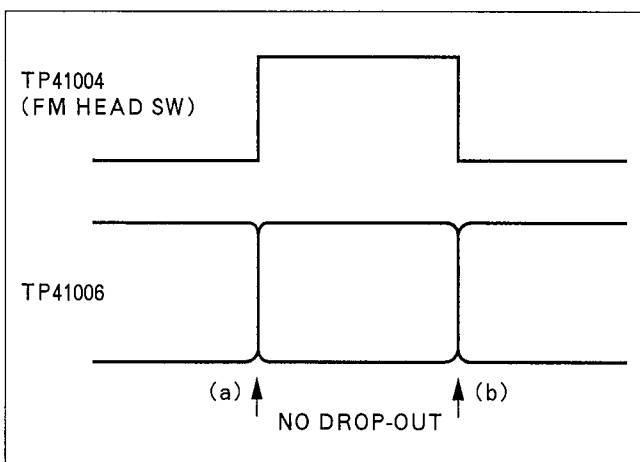


Figure E52



### 7-7-12. Hi-Fi AUDIO CARRIER FREQUENCY ADJ.

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	TP41005 (CH1)(E-2), TP41008 (CH2)(F-3)
<b>ADJ.</b>	VR41002 (CH1)(C-1), VR41006 (CH2)(F-3)
<b>TAPE</b>	
<b>INPUT</b>	NO SIGNAL
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	FREQUENCY COUNTER
<b>SPEC.</b>	CH1 : 1.3MHz $\pm$ 10KHz CH2 : 1.7MHz $\pm$ 10KHz

#### « NOTE »

If the signal level is too low to trigger frequency counter, adjust VR41003 (L CH) and VR41007 (R CH) clockwise. And then refer to 7-7-14. Hi-Fi Audio Rec Current Adj. for the correct setting of these VRs, after this adjustment.

#### « SET UP »

S-VHS REC : ON (MENU NO.2006)

Hi-Fi INPUT SELECT : Hi-Fi INPUT (MENU NO.3004)

1. Ground the Hi-Fi Audio Inputs (CH1 & CH2).
2. Connect the frequency counter to TP41005 (CH1) and adjust VR41002 (CH1) so that the frequency becomes 1.3MHz  $\pm$  10KHz.
3. Connect the frequency counter to TP41008 (CH1) and adjust VR41006 (CH2) so that the frequency becomes 1.7MHz  $\pm$  10KHz.

2. Connect the spectrum analyzer to TP41005 (CH1) and set the center frequency to 1.3MHz.
3. Adjust VR41001 (CH1) so that the width of the "fw" portion becomes 100KHz  $\pm$  5KHz as shown in Figure E53.
4. Change the probe of spectrum analyzer from TP41005 (CH1) to TP41008 (CH2) and set the center frequency to 1.7MHz.
5. Adjust VR41005 (CH2) so that the width of the "fw" portion becomes 100KHz  $\pm$  5KHz as shown in Figure E53.

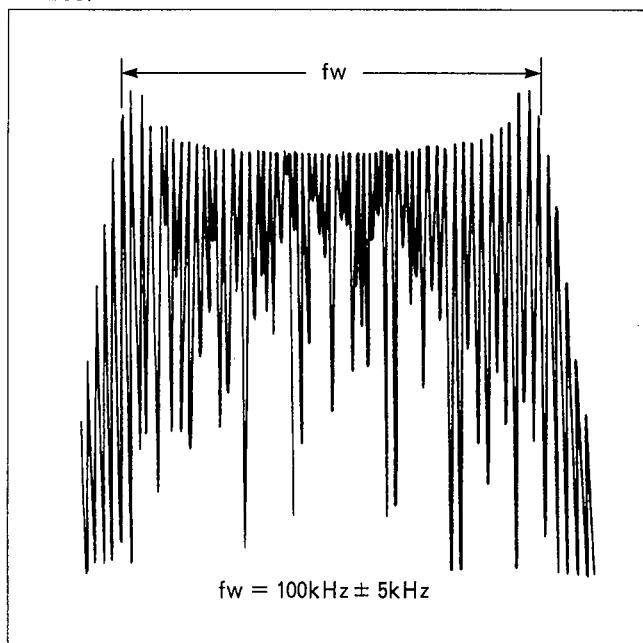


Figure E53

### 7-7-13. Hi-Fi AUDIO DEVIATION ADJ.

#### « NOTE »

This adjustment should be performed only after completion of 7-7-2. Hi-Fi Audio Input Level Adj.

#### A. FACTORY & LEAGAL ADJ.

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	TP41005 (CH1)(F-1), TP41008 (CH1)(F-1)
<b>ADJ.</b>	VR41001 (CH1)(F-1), VR41005 (CH2)(E-1)
<b>TAPE</b>	
<b>INPUT</b>	1KHz, 0dBm SINE WAVE SIGNAL
<b>MODE</b>	EJECT (E-E)
<b>M. EQ</b>	SPECTRUM ANALYZER
<b>SPEC.</b>	fw = 100KHz $\pm$ 5KHz

#### « SET UP »

INPUT AUDIO LEVEL SW (Hi-Fi) : 0dBs

Hi-Fi INPUT SELECT : Hi-Fi INPUT (MENU NO.3004)

Hi-Fi REC : ON (MENU NO.3003)

Hi-Fi AUDIO (CH1/2) LEVEL CONTROL : CENTER

1. Supply a 1KHz, 0dBm sine wave signal to the Hi-Fi AUDIO (CH1 & CH2) INPUTs.

#### B. FIELD ADJ.

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	Hi-Fi AUDIO OUTPUT (CH1)(CH2)
<b>ADJ.</b>	VR41001 (CH1)(F-1), VR41005 (CH2)(E-1)
<b>TAPE</b>	VFM8080HQFP, PORTION: 5
<b>INPUT</b>	
<b>MODE</b>	PLAYBACK
<b>M. EQ</b>	V.T.V.M. (D.V.M.) or OSCILLOSCOPE
<b>SPEC.</b>	-4dBm $\pm$ 0.5dBm

#### « SET UP »

OUTPUT AUDIO LEVEL SW (Hi-Fi) : 0dBs

1. Playback the alignment tape VFM8080HQFP portion 5.
2. Connect a V.T.V.M to the Hi-Fi Audio Outputs (CH1, CH2).
3. Adjust VR41001 so that the level becomes -4dBm  $\pm$  0.5 dBm.
4. Adjust VR41005 (CH2) so that the level becomes -4dBm  $\pm$  0.5dBm.



### 7-7-14. NORMAL AUDIO REC CURRENT ADJ.

<b>BOARD</b>	AUDIO (1) C.B.A. (E7)
<b>TP</b>	NORM./Hi-Fi AUDIO OUT, Hi-Fi AUDIO OUT TP40003 (CH1)(B-1), TP40006 (CH2)(C-1)
<b>ADJ.</b>	VR40005 (CH1)(E-1), VR40010 (CH2)(D-1)
<b>TAPE</b>	S-VHS BLANK
<b>INPUT</b>	1KHz, 0dBm SINE WAVE SIGNAL
<b>MODE</b>	REC & PLAY
<b>M. EQ</b>	V.T.V.M. (D.V.M.)
<b>SPEC.</b>	0dBm $\pm$ 1dBm

#### « SET UP »

S-VHS REC : ON (MENU NO.2006)  
 DOLBY NR : OFF (MENU NO.3001)  
 AUDIO LIMITER : OFF (MENU NO.3002)  
 CH1 REC : CH1 (MENU NO.3005)  
 AUDIO CH2 : AUDIO (MENU NO.3006)  
 INPUT AUDIO LEVEL SW (NORM./Hi-Fi) : 0dBs  
 NORM. AUDIO (CH1/2) LEVEL CONTROL : CENTER

1. Connect the V.T.V.M.s to the deck as shown in Figure E54. Note that only one channel will be adjusted at a time.
2. Supply a 1KHz, 0dBm sine wave signal to NORM./Hi-Fi AUDIO INPUT (CH1).
3. Place the deck in the REC mode with S-VHS mode.
4. Adjust VR40005 (CH1) so that V.T.V.M. (2) reads approximately 0.8Vrms (2.26Vp-p).  
 Suppose that the indicated value on V.T.V.M. (1) is 0dBm.
5. Play back the recorded portion, and note the amount of difference between V.T.V.M. (1) and (2).
6. Place the deck in the REC mode again, and re-adjust VR40005 (CH1) slightly, and repeat step 5, noting the new difference.
7. Repeat this step 3 to 6 until record and playback difference is minimized (0dBm  $\pm$  1dBm).
8. Repeat the above procedure again for channel 2, using the other set of test point (TP40006) and VR (VR40010).

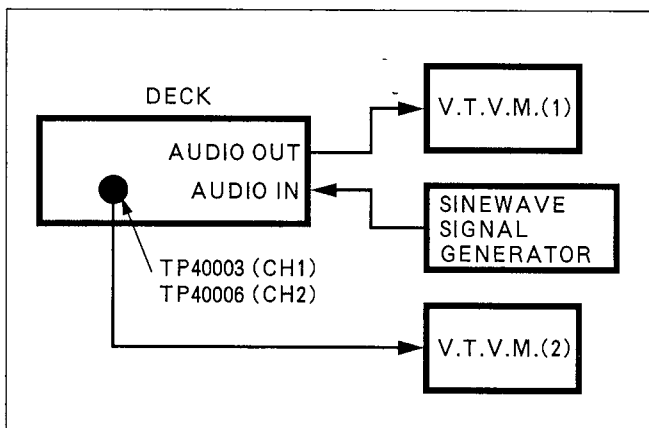


Figure E54

### 7-7-15. Hi-Fi AUDIO REC CURRENT ADJ.

<b>BOARD</b>	AUDIO (2) C.B.A. (E8)
<b>TP</b>	TP5001 (HEAD AMP C.B.A.)
<b>ADJ.</b>	VR41007 (B-1), VR41003 (B-1)
<b>TAPE</b>	S-VHS RECORDED TAPE
<b>INPUT</b>	NO SIGNAL
<b>MODE</b>	REC
<b>M. EQ</b>	OSCILSCOPE
<b>SPEC.</b>	CH1: 290mVp-p $\pm$ 5mVp-p CH2: 210mVp-p $\pm$ 5mVp-p

#### « SET UP »

S-VHS REC : ON (MENU NO.2006)  
 Hi-Fi REC : ON (MENU NO.3003)  
 Hi-Fi INPUT SELECT : Hi-Fi INPUT (MENU NO.3004)

1. Ground the Hi-Fi AudioInput.
2. Turn VR41003 fully counter-clockwise.
3. Adjust VR41007 so that the level becomes 210mVp-p  $\pm$  5mVp-p as shown in Figure E55.
4. Adjust VR41003 so that the level becomes 290mVp-p  $\pm$  5mVp-p as shown in Figure E56.

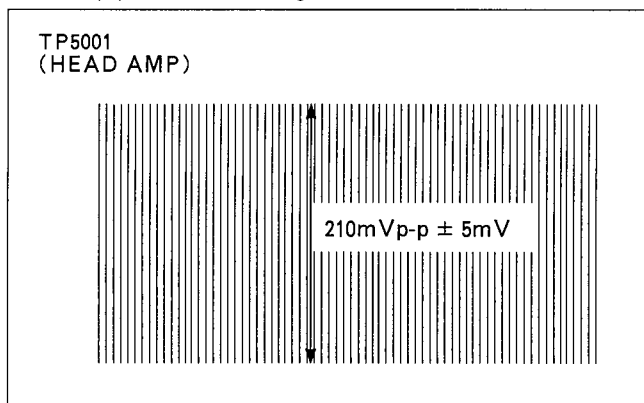


Figure E55

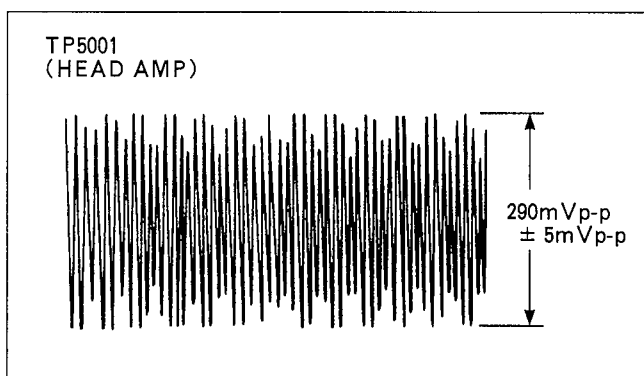


Figure E56



## 7-8.OTHER SECTION

### 7-8-1. VITC MUTE PULSE ADJ.

BOARD	TIME CODE C.B.A.
TP	TP68003 (B-14) TP3004 (C-3): VIDEO I/O C.B.A.
ADJ.	VR68001 (B-14)
TAPE	S-VHS BLANK
INPUT	COLOR BAR SIGNAL (LINE)
MODE	REC
M. EQ	OSCILLOSCOPE
SPEC.	$T = 1 \mu\text{sec} \pm 0.3 \mu\text{sec}$ .

#### ◀ SET UP ▶

VITC REC : ON (MENU NO.7003)

INPUT SW : LINE

ALL DEL SW (SW68001: TC C.B.A.) : ON

1. Connect a scope to TP3004 for CH-1 and TP68003 for CH-2 and expand V-Sync portion as shown in Figure E57.
2. Adjust VR68001 so that the "T" becomes  $1 \mu\text{sec} \pm 0.3 \mu\text{sec}$  as shown in Figure E57.

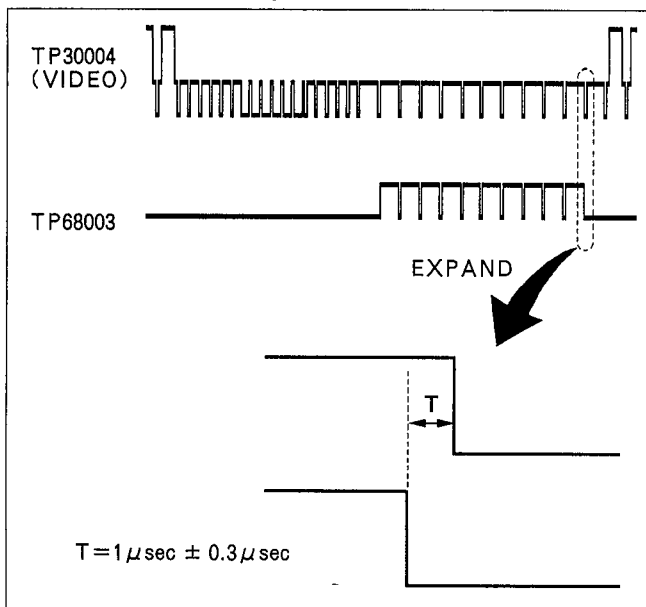


Figure E57

### 7-8-2. OSD CHARACTER WIDTH ADJ.

BOARD	REAR AMP C.B.A. (E28)
TP	VIDEO MONITOR OUT
ADJ.	CT6601 (B-5)
TAPE	
INPUT	NO SIGNAL
MODE	EJECT (E-E)
M. EQ	OSCILLOSCOPE
SPEC.	$T = 52 \mu\text{sec} \pm 0.5 \mu\text{sec}$ .

#### ◀ SET UP ▶

DIAL MODE : MENU

1. Connect the oscilloscope to VIDEO MONITOR OUT.
2. Turn the JOG dial so that the SETUP-MENU NO. becomes 1001 (flash).
3. Adjust CT6601 so that the "T" becomes  $52 \mu\text{sec} \pm 0.5 \mu\text{sec}$  as shown in Figure E58.

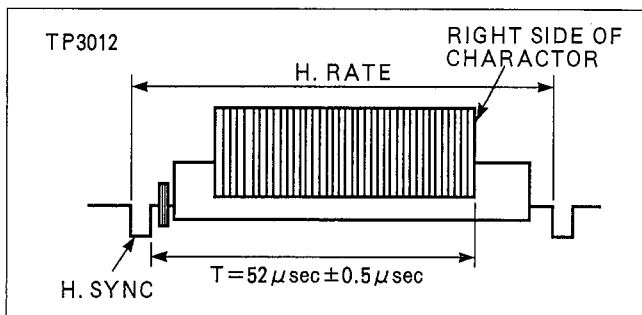


Figure E58

### 7-8-3. FLYING ERASE CURRENT ADJ.

BOARD	AUDIO (2) C.B.A. (E8)
TP	TP41009 (HOT)(A-1), TP41010 (GNE)(A-1)
ADJ.	VR41015 (B-1), VR41016 (B-1)
TAPE	S-VHS RECORDED TAPE
INPUT	COLOR BAR SIGNAL (LINE)
MODE	VIDEO INSERT EDIT
M. EQ	OSCILLOSCOPE
SPEC.	$150\text{mVp-p} \pm 10\text{mVp-p}$

#### ◀ SET UP ▶

IMAGE MODE SELECT : NORMAL (MENU NO.2001)

VIDEO MODE : COLOR (MENU NO.2002)

S-VHS REC : ON (MENU NO.2006)

INPUT SW : LINE

VIDEO LEVEL control : PUSH (AGC : ON)

1. Place the deck in the video insert edit node.
2. Connect the GND of oscilloscope to TP41010.
3. Connect a scope to TP41009 (HOT), TP41010 (GND) and adjust VR41015 and VR41016 so that the "A" and "B" levels become  $150\text{mVp-p} \pm 10\text{mVp-p}$  as shown in Figure E59.

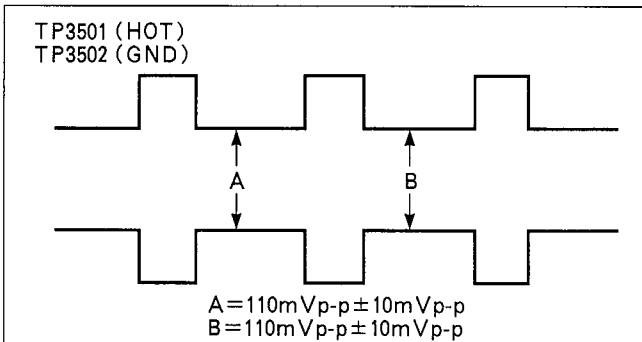


Figure E59



# SECTION 8

## BLOCK DIAGRAMS

### CONTENTS

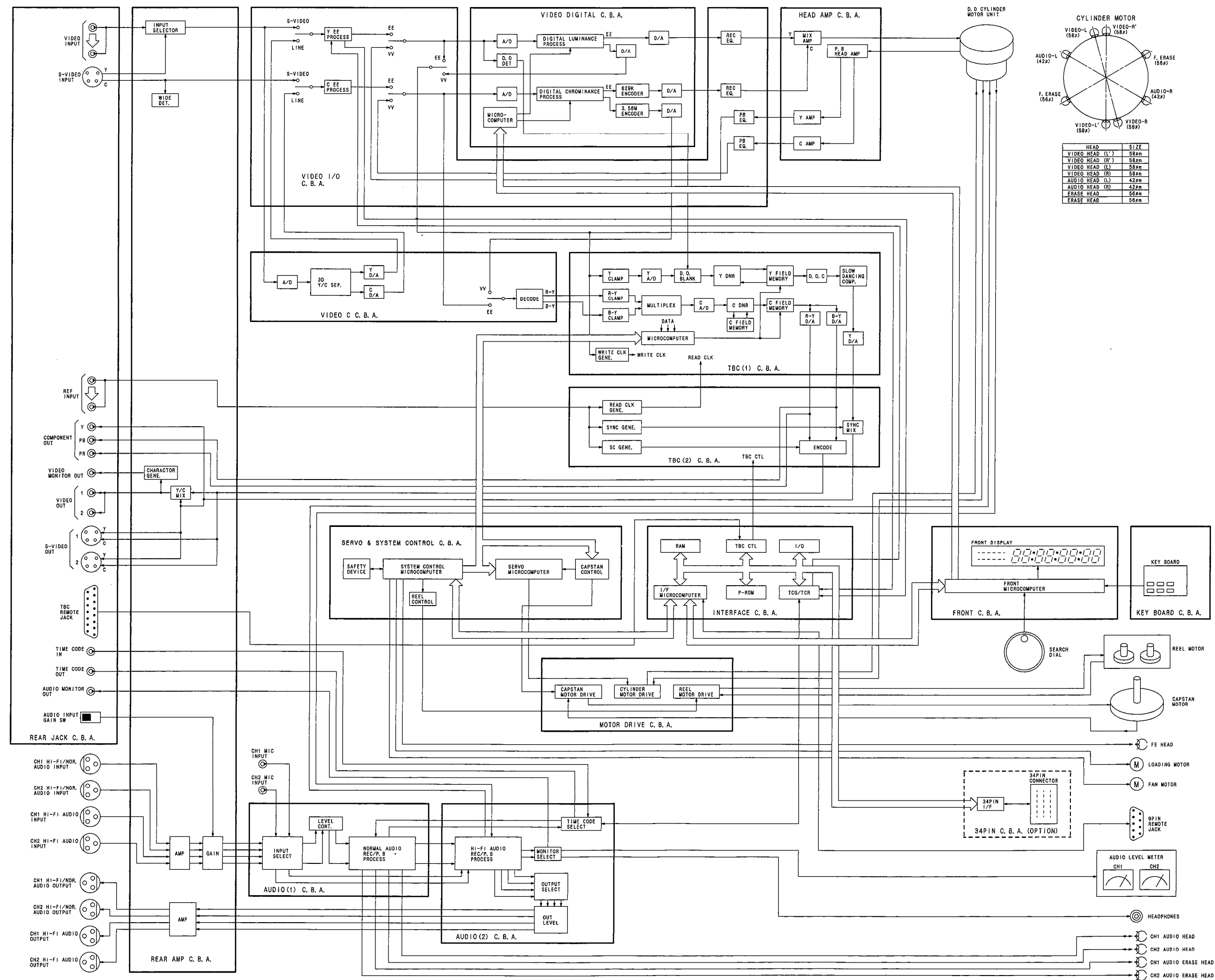
OVERALL BLOCK DIAGRAM .....	BLK-3
FRONT BLOCK DIAGRAM .....	BLK-4
SYSTEM CONTROL BLOCK DIAGRAM .....	BLK-5
SERVO BLOCK DIAGAM .....	BLK-6
VIDEO OVERALL BLOCK DIAGRAM .....	BLK-6
VIDEO C BLOCK DIAGRAM .....	BLK-7
VIDEO DIGITAL BLOCK DIAGRAM .....	BLK-8
VIDEO I/O BLOCK DIAGRAM .....	BLK-9
NORMAL AUDIO BLOCK DIAGRAM .....	BLK-10
Hi-Fi AUDIO BLOCK DIAGAM .....	BLK-11
TBC (1) BLOCK DIAGRAM .....	BLK-12
TBC (2) BLOCK DIAGRAM .....	BLK-13
INTERFACE BLOCK DIAGRAM .....	BLK-14







OVERALL BLOCK DIAGRAM

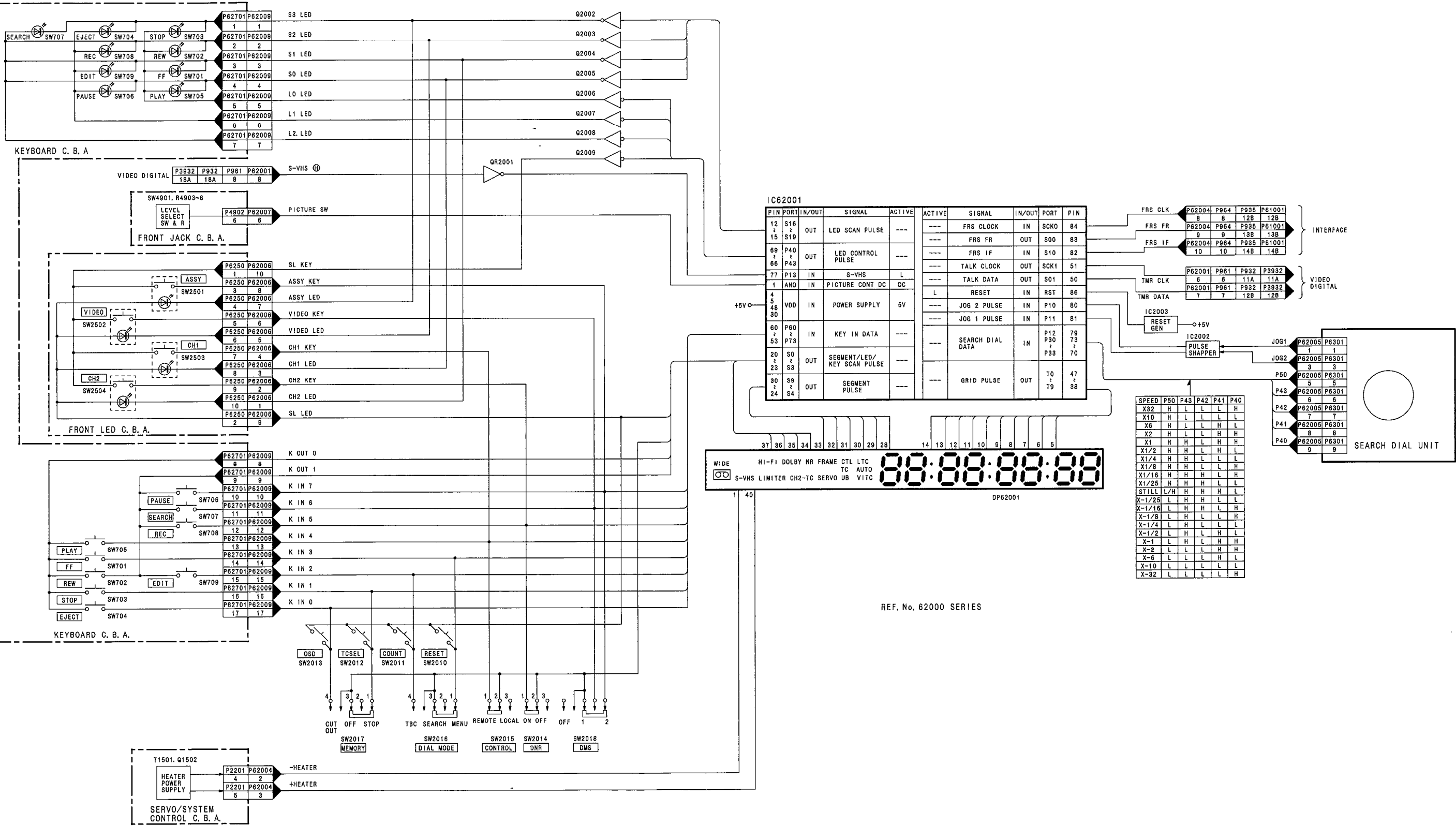


CYLINDER MOTOR

HEAD	SIZE
VIDEO HEAD (L')	58mm
VIDEO HEAD (R')	58mm
VIDEO HEAD (L)	58mm
VIDEO HEAD (R)	58mm
AUDIO HEAD (L)	42mm
AUDIO HEAD (R)	42mm
ERASE HEAD	58mm
ERASE HEAD	58mm



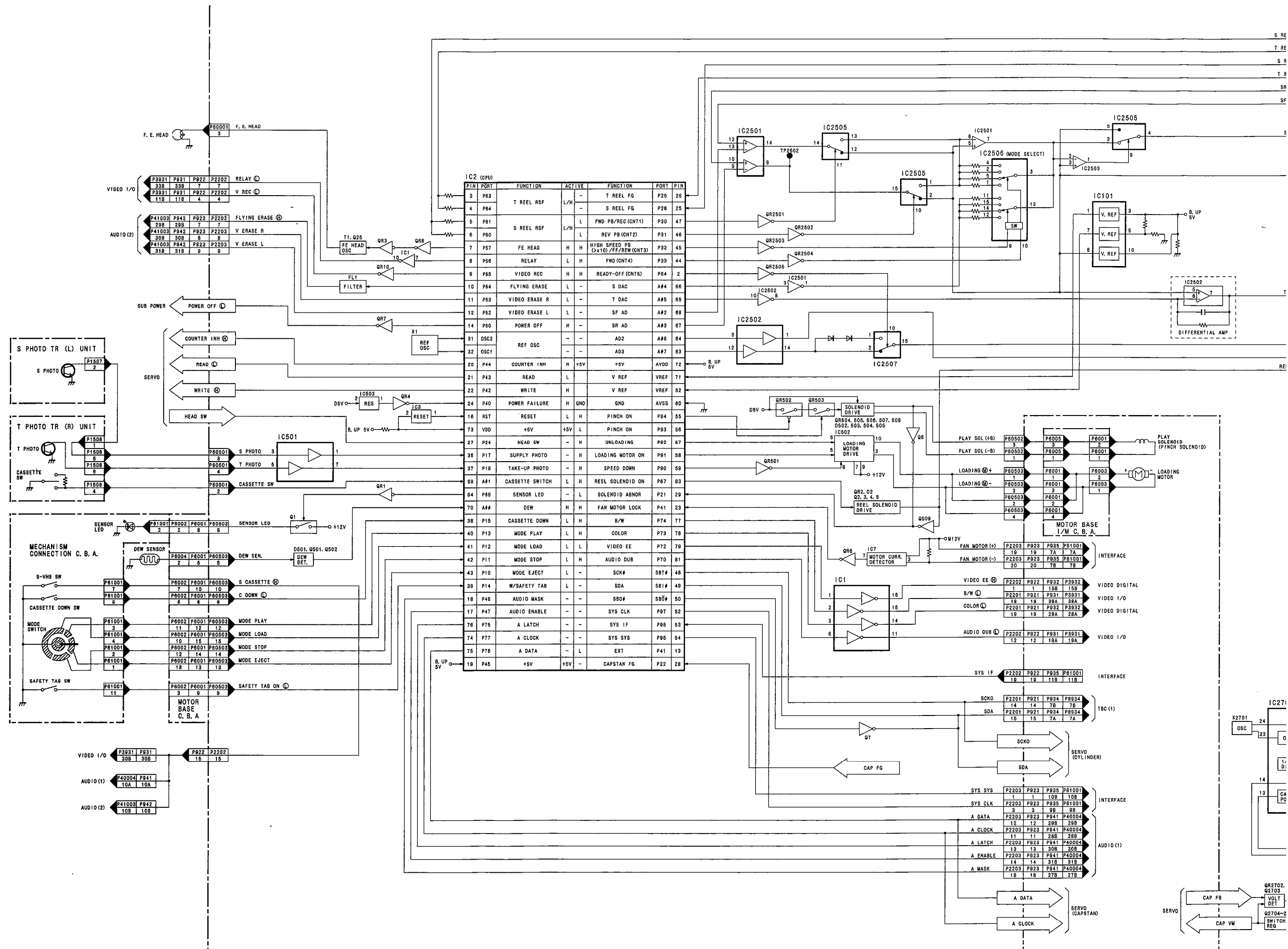
FRONT BLOCK DIAGRAM



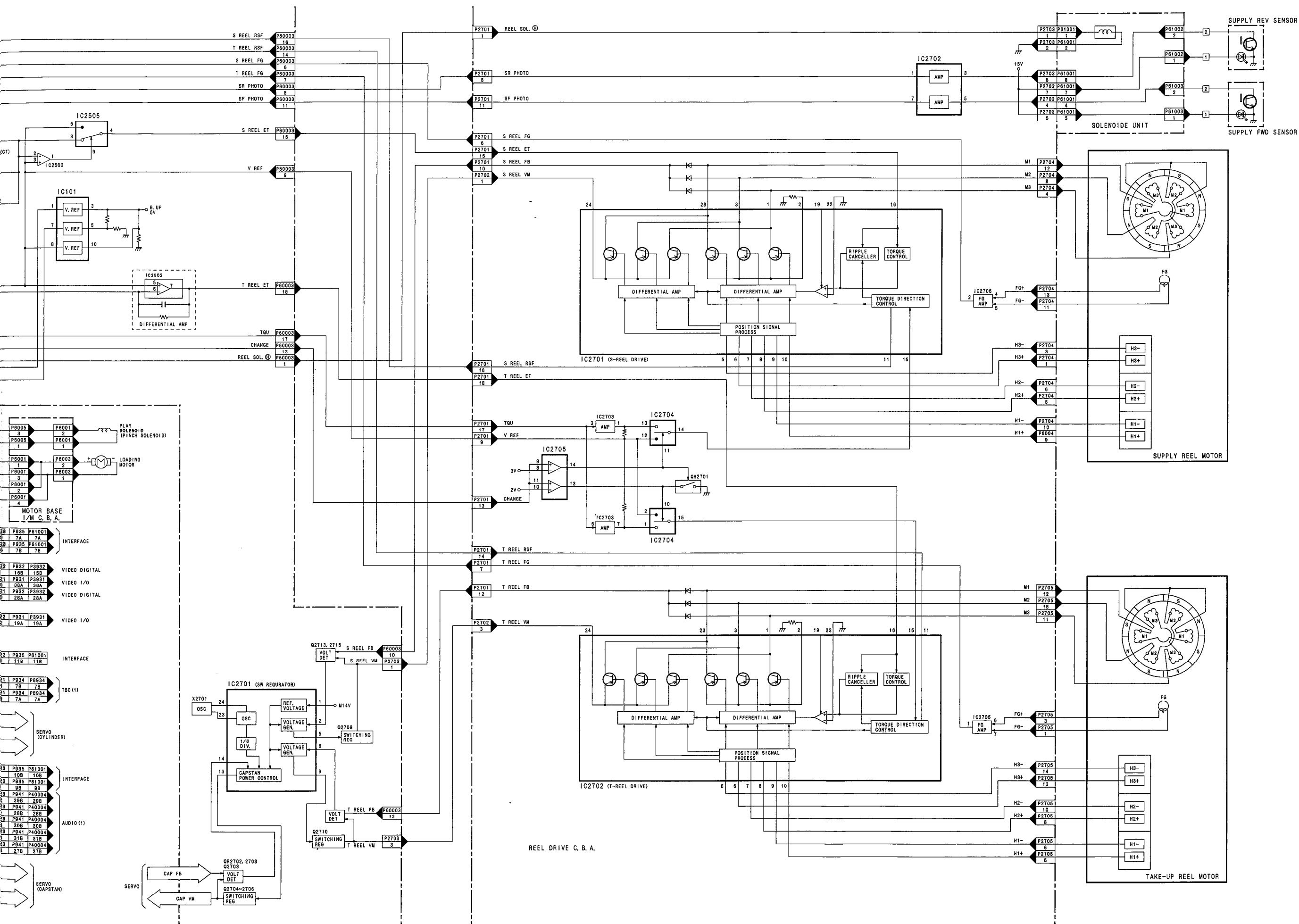
REF. No. 62000 SERIES



# SYSTEM CONTROL BLOCK DIAGRAM

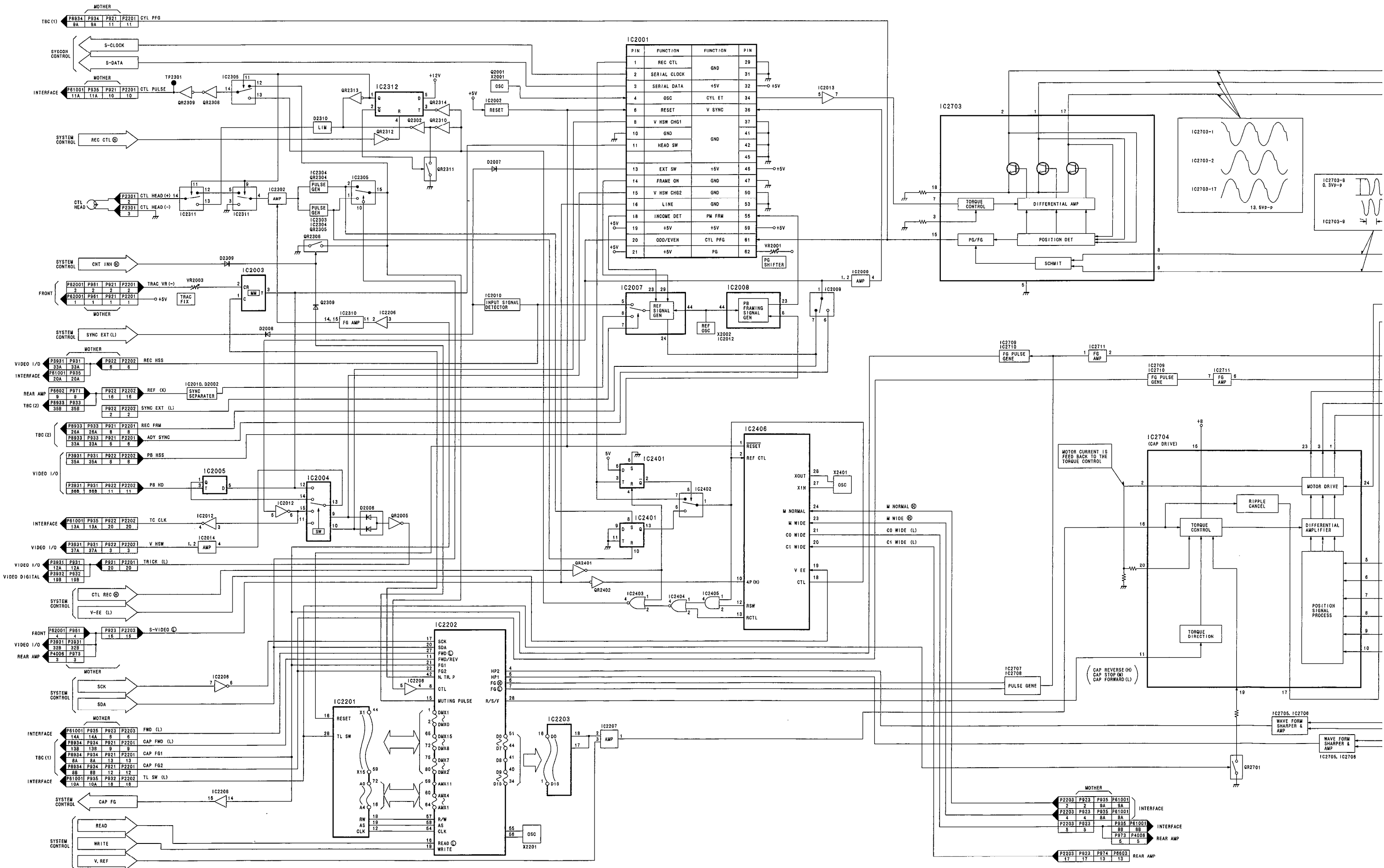






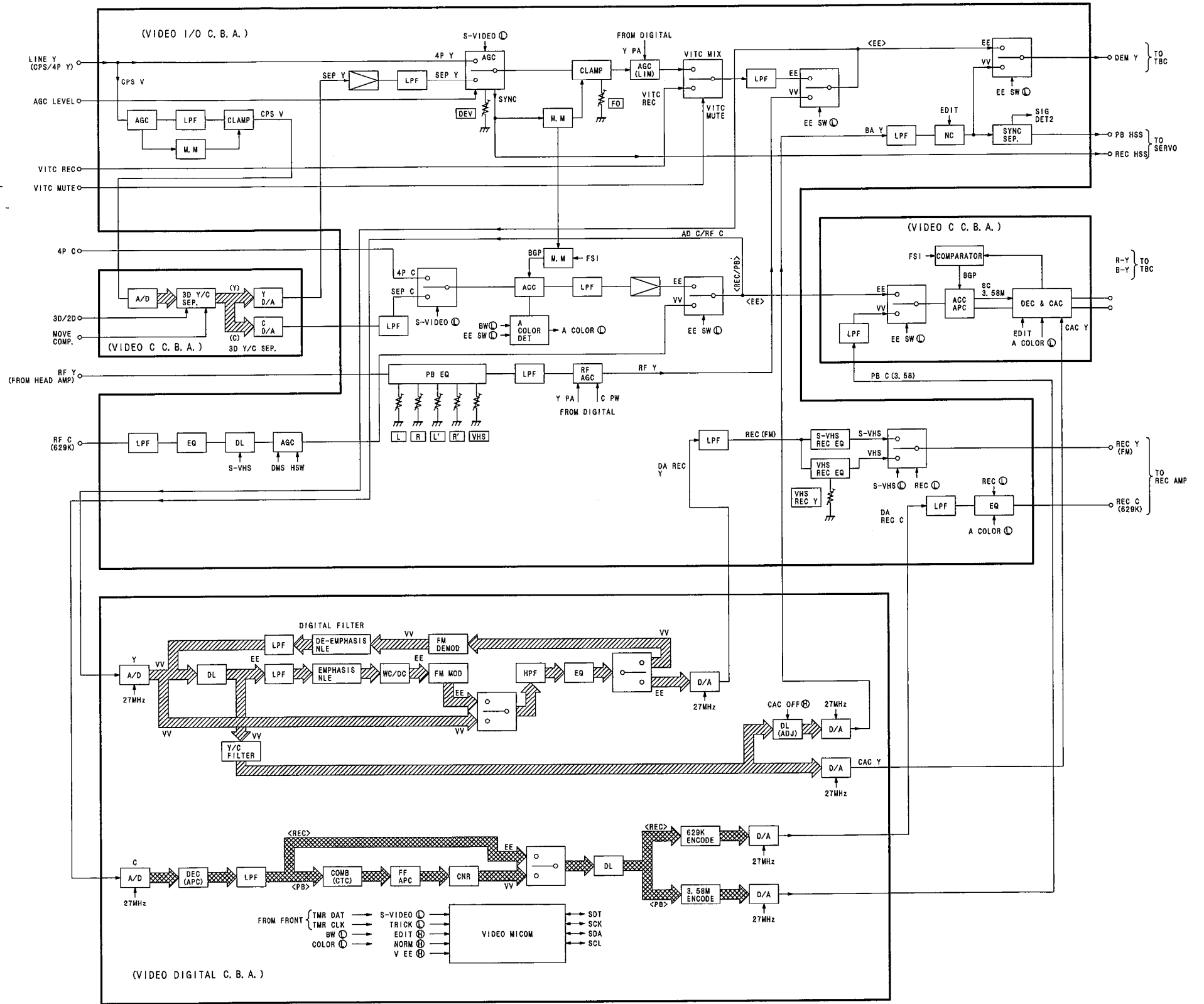
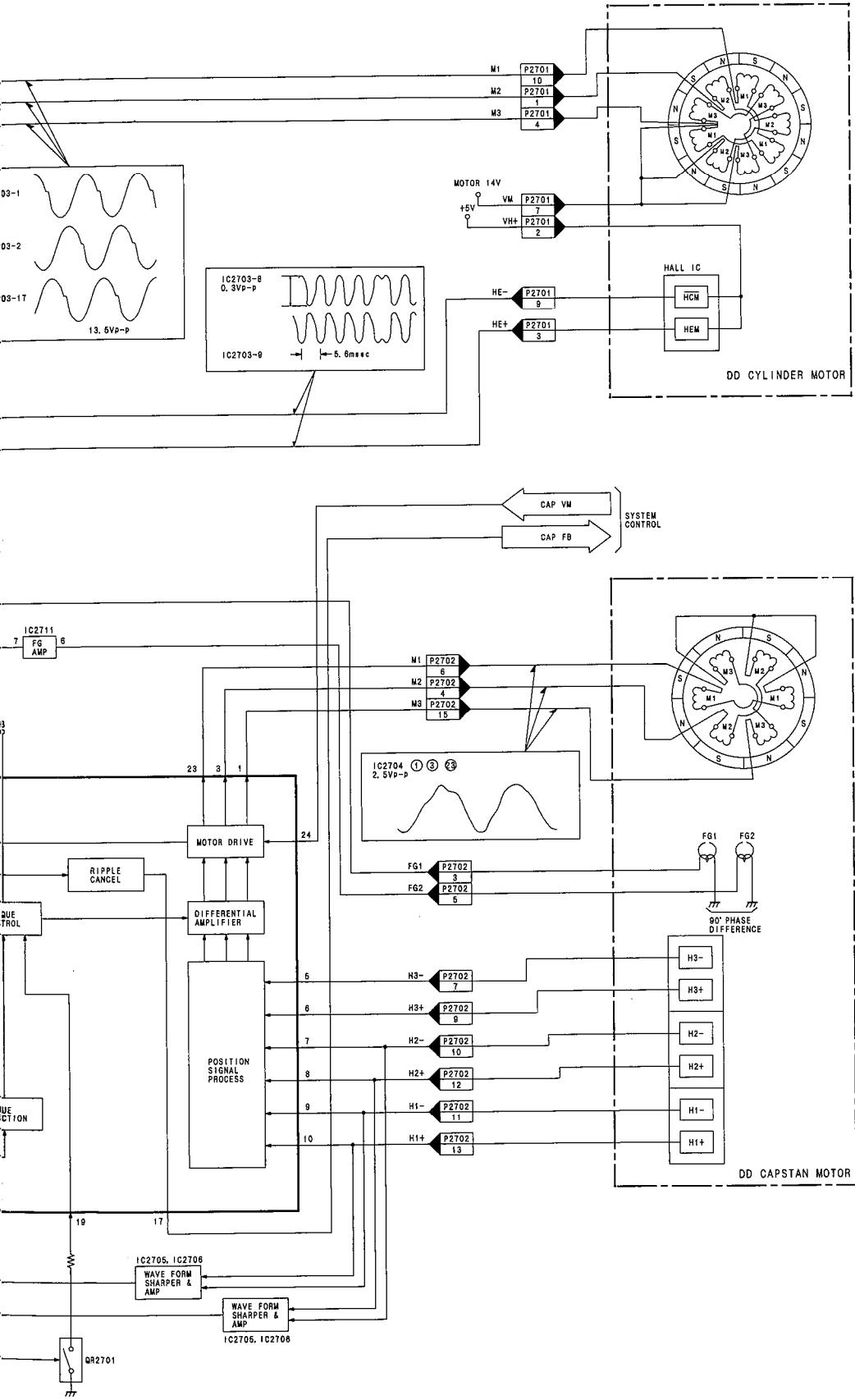


## SERVO BLOCK DIAGRAM









VIDEO OVERALL BLOCK DIAGRAM

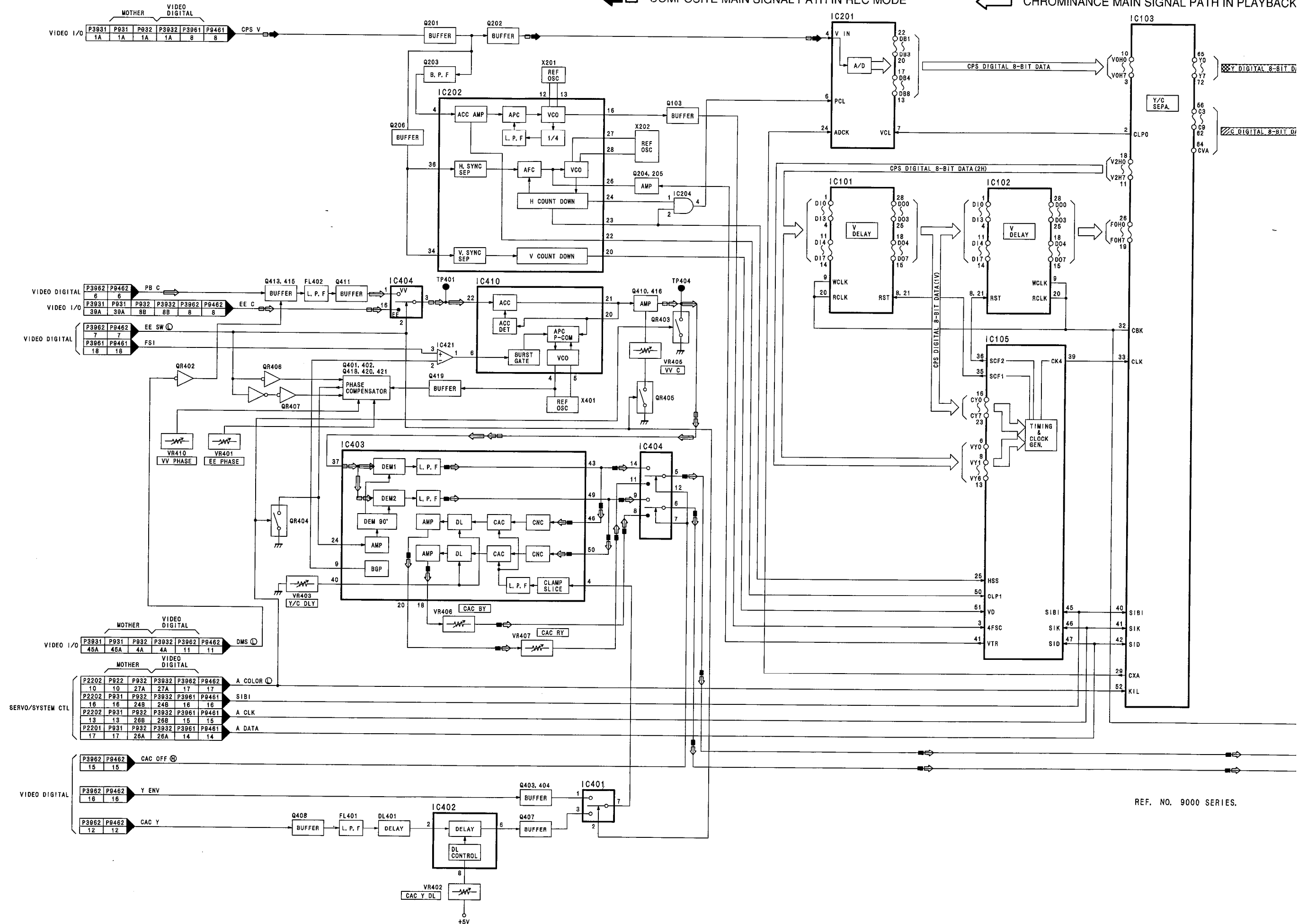






# VIDEO C BLOCK DIAGRAM



 LUMINANCE MAIN SIGNAL PATH IN REC MODE  
 COMPOSITE MAIN SIGNAL PATH IN REC MODE

 CHROMINANCE MAIN SIGNAL PATH IN REC MODE  
 CHROMINANCE MAIN SIGNAL PATH IN PLAYBACK

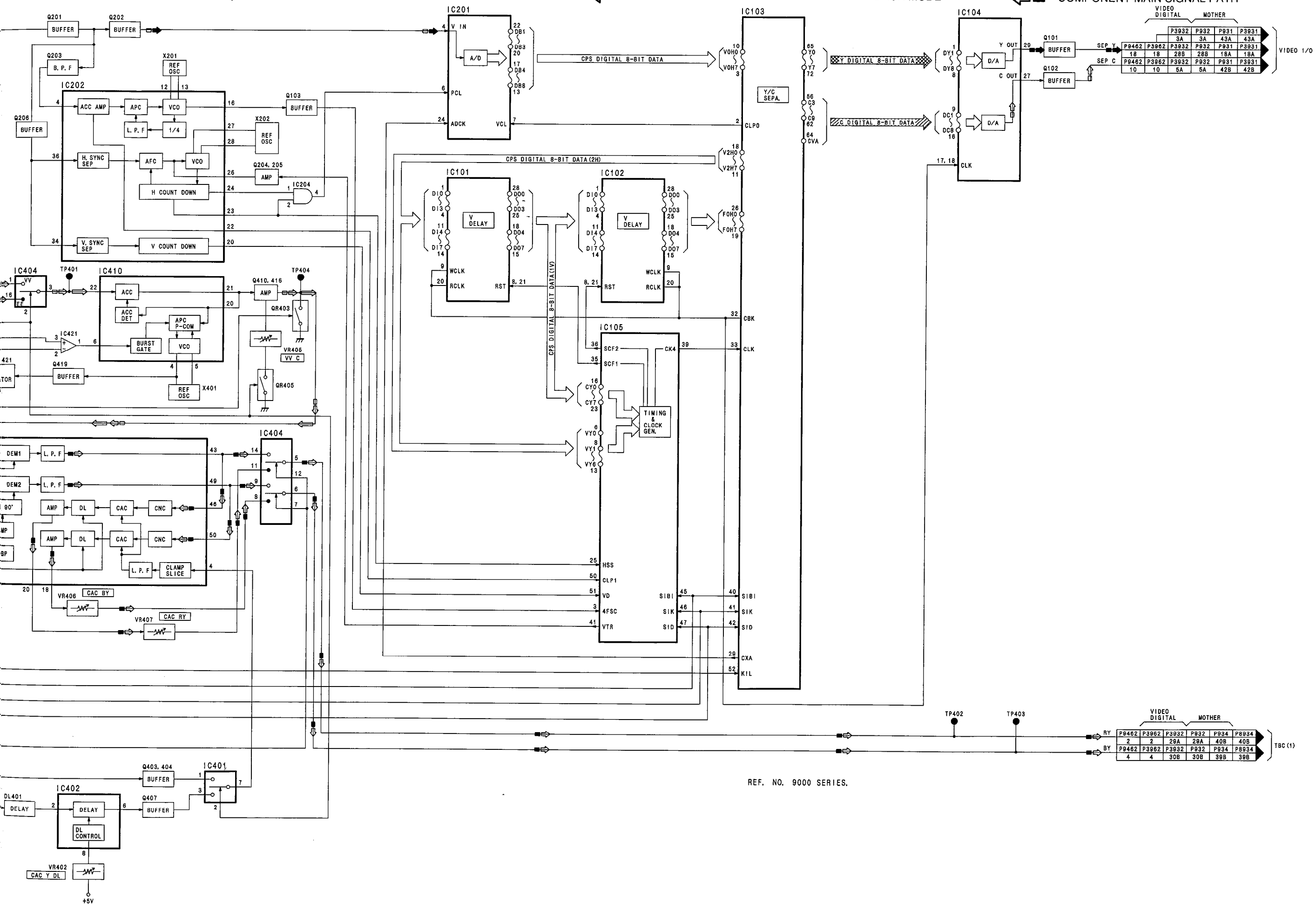




 LUMINANCE MAIN SIGNAL PATH IN REC MODE  
 COMPOSITE MAIN SIGNAL PATH IN REC MODE

 CHROMINANCE MAIN SIGNAL PATH IN REC MODE  
 CHROMINANCE MAIN SIGNAL PATH IN PLAYBACK MODE

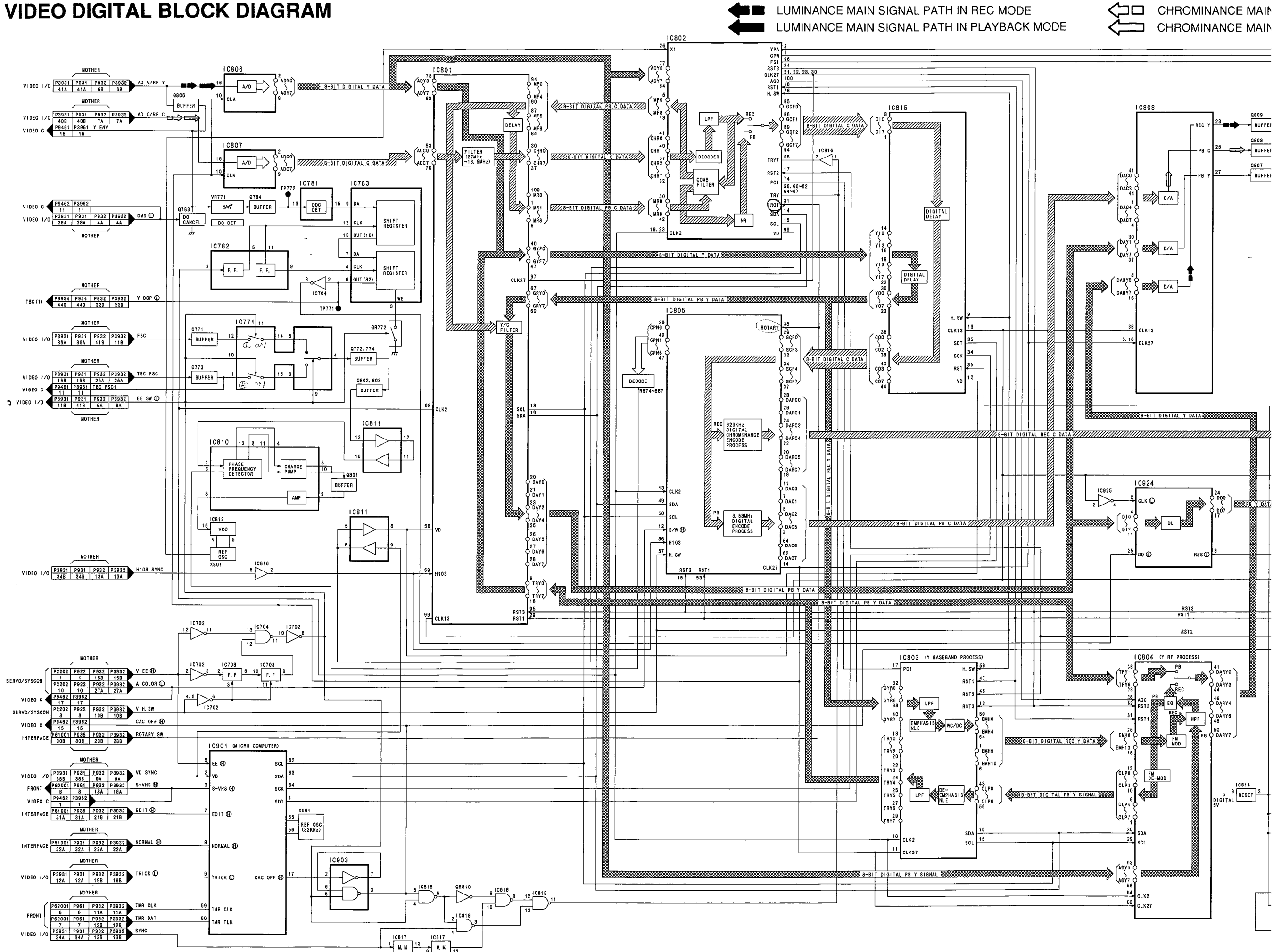
 COMPONENT MAIN SIGNAL PATH



REF. NO. 9000 SERIES.



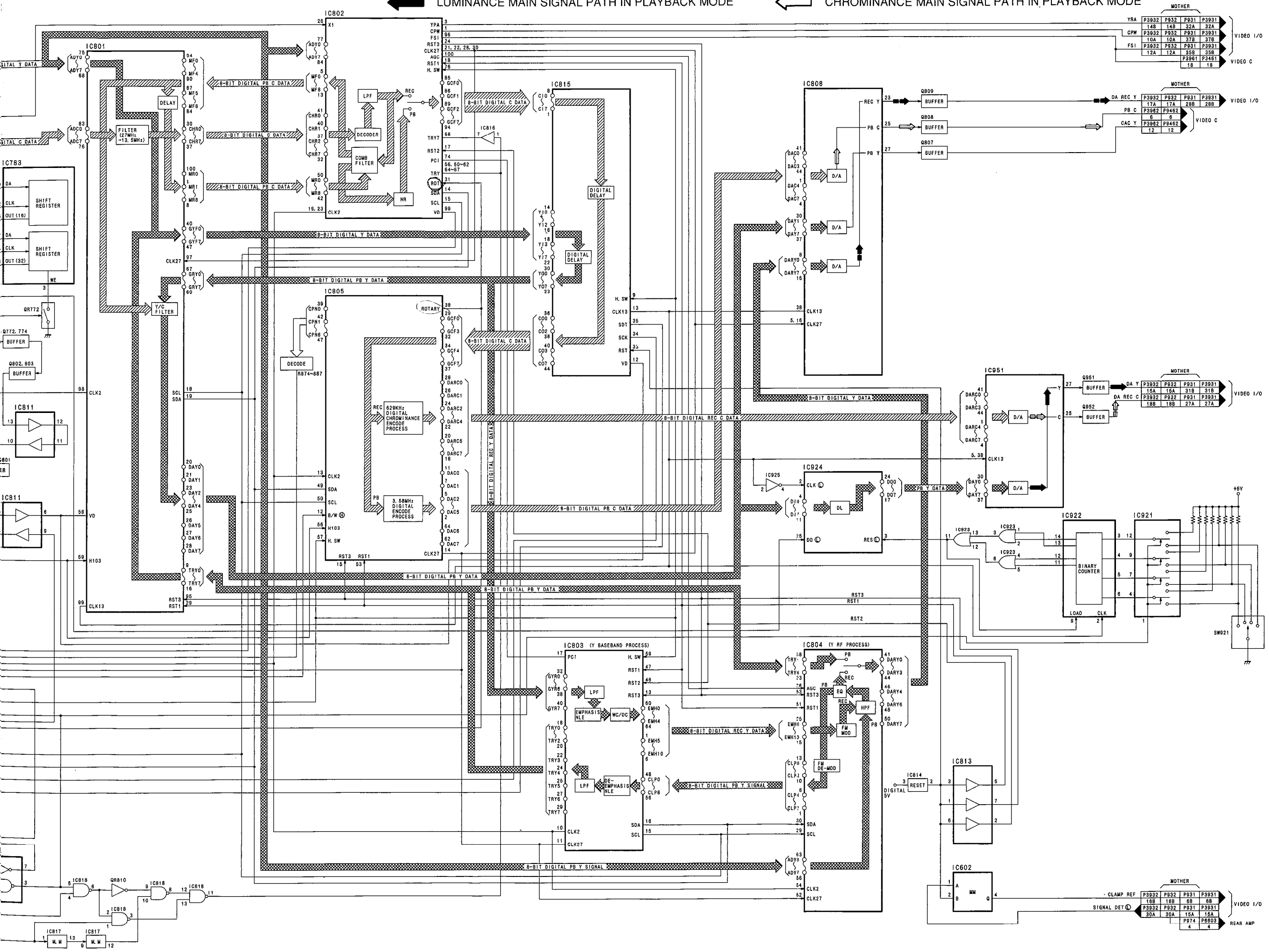
## VIDEO DIGITAL BLOCK DIAGRAM





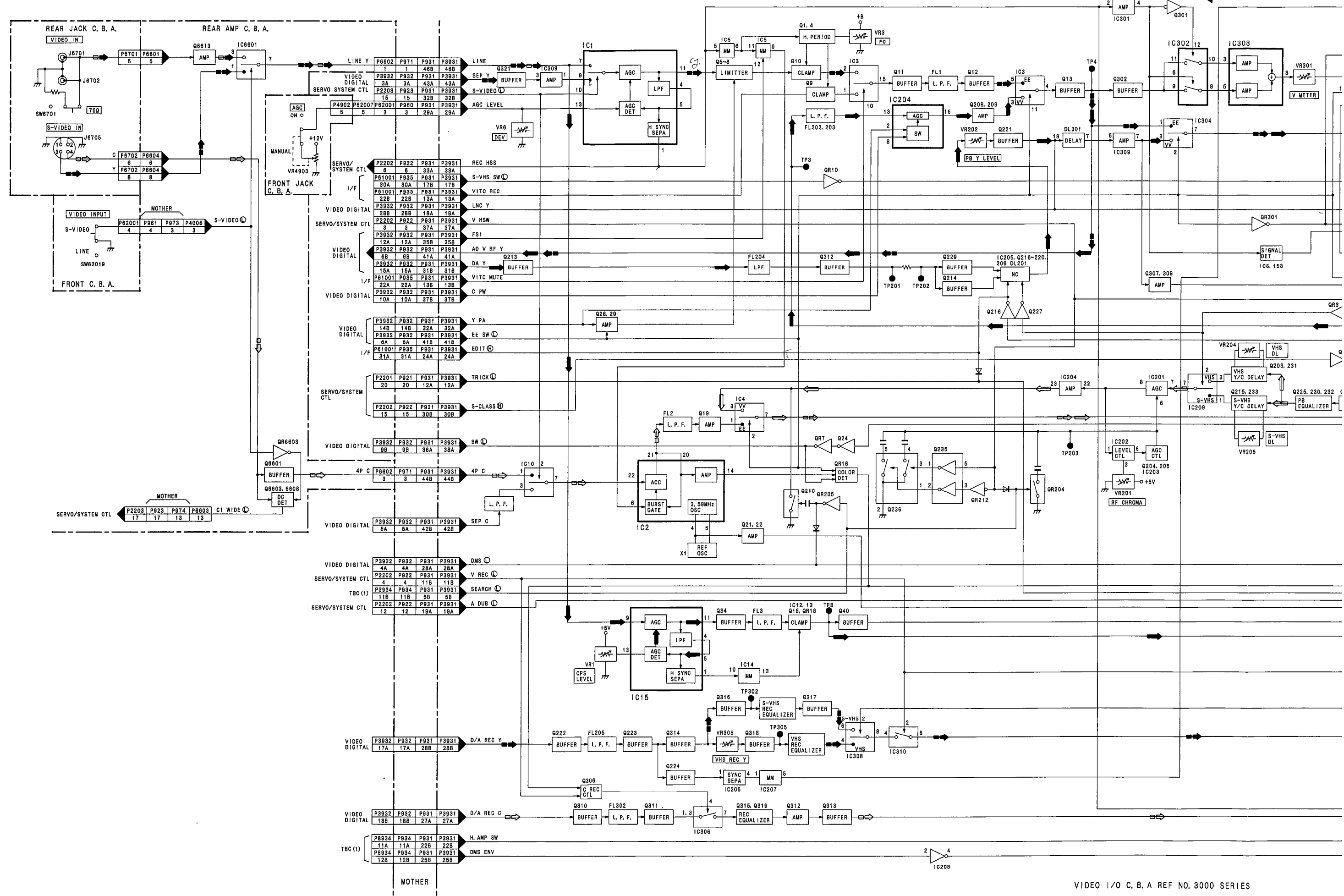
← LUMINANCE MAIN SIGNAL PATH IN REC MODE  
← LUMINANCE MAIN SIGNAL PATH IN PLAYBACK MODE

← CHROMINANCE MAIN SIGNAL PATH IN REC MODE  
← CHROMINANCE MAIN SIGNAL PATH IN PLAYBACK MODE

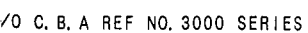




## VIDEO I/O BLOCK DIAGRAM

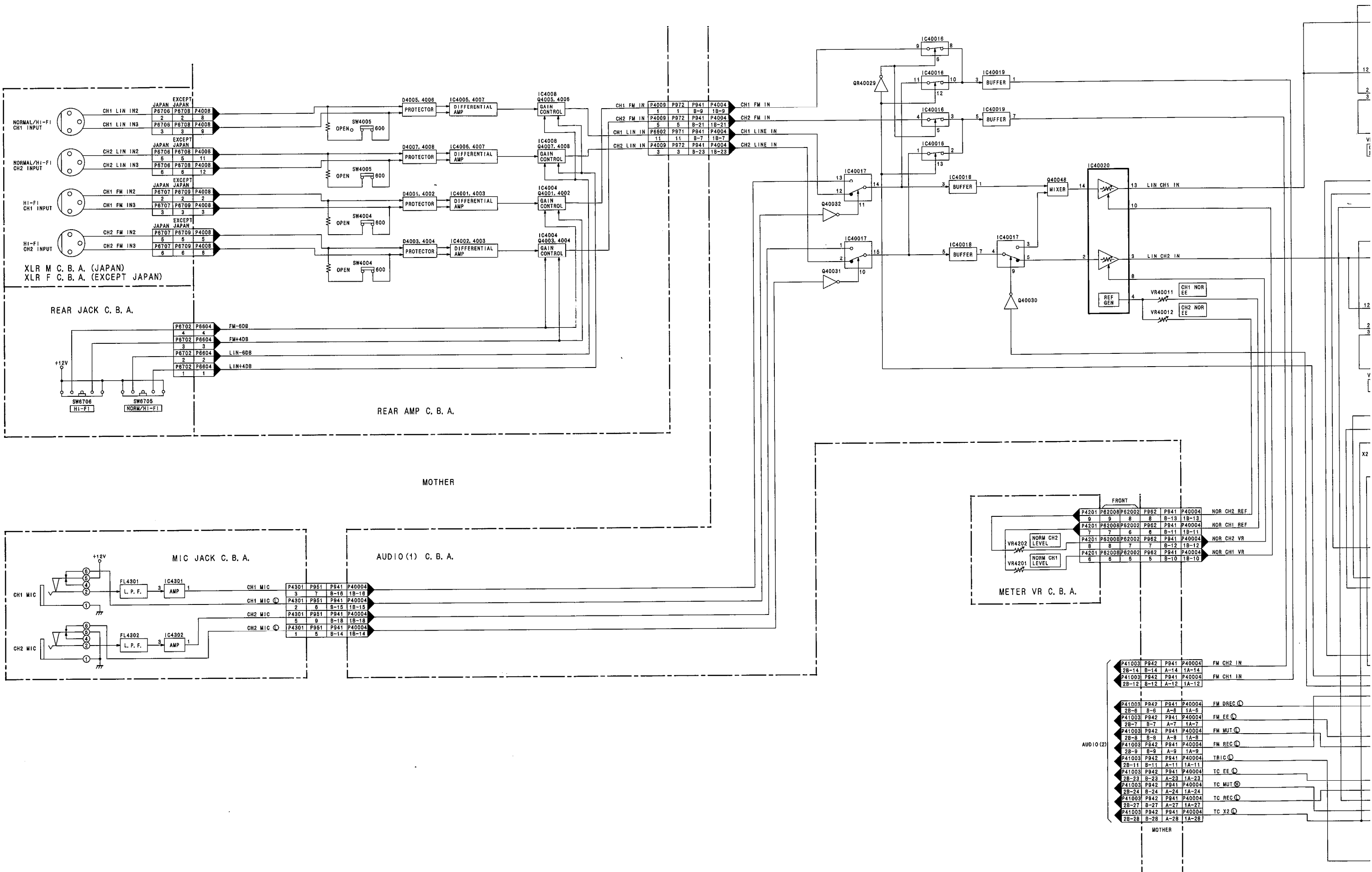




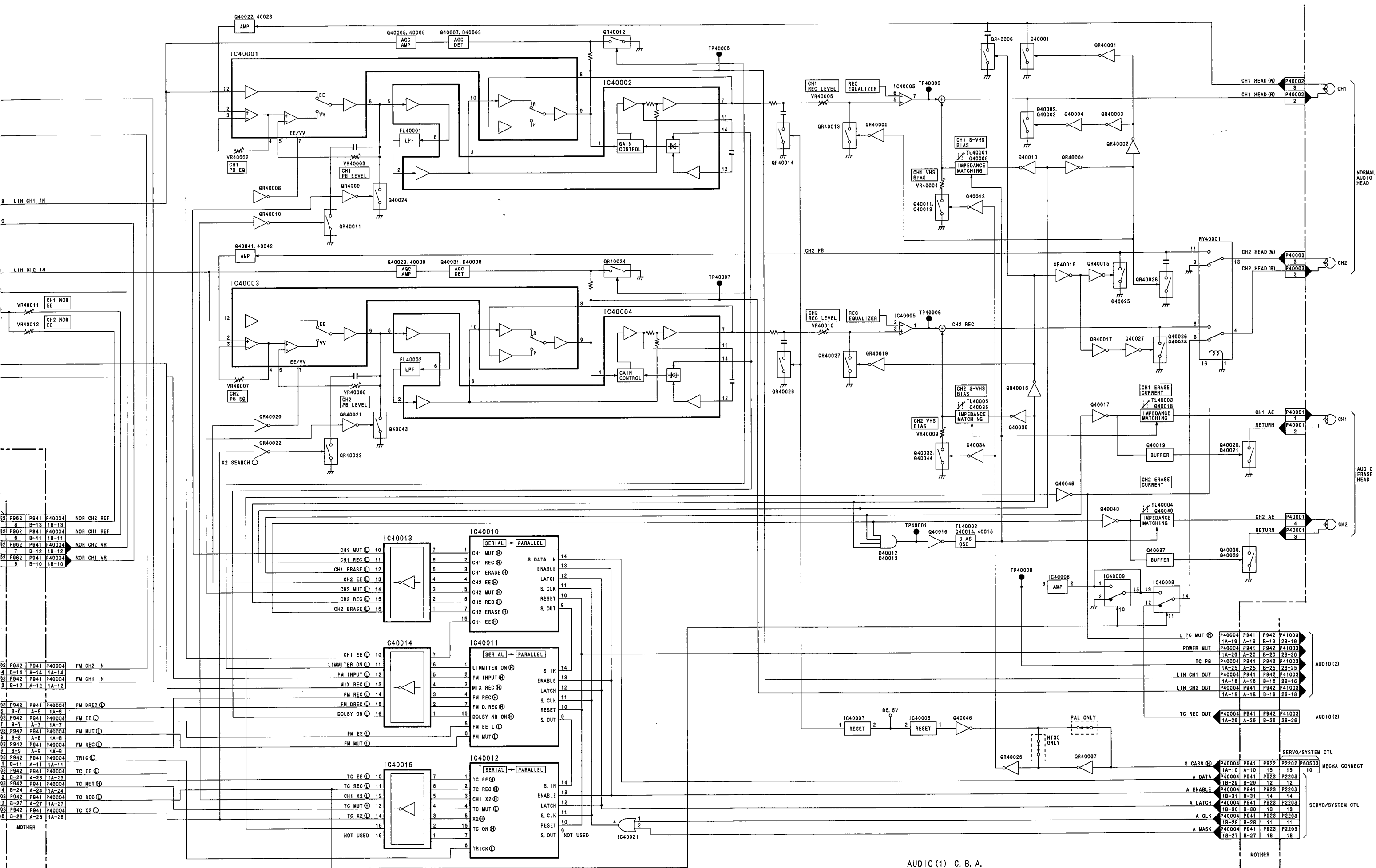




NORNAL AUDIO BLOCK DIAGRAM

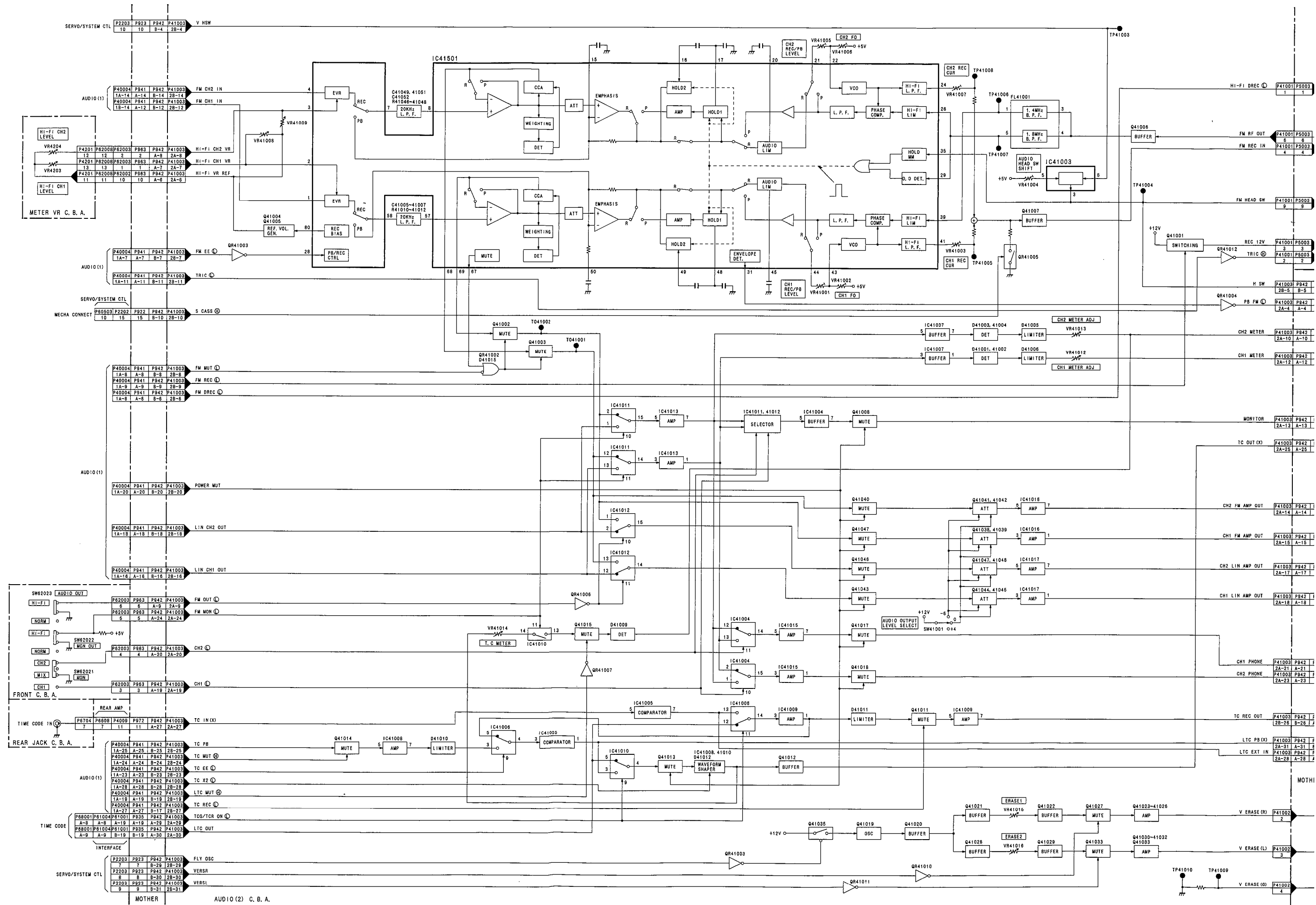








# Hi-Fi AUDIO BLOCK DIAGRAM

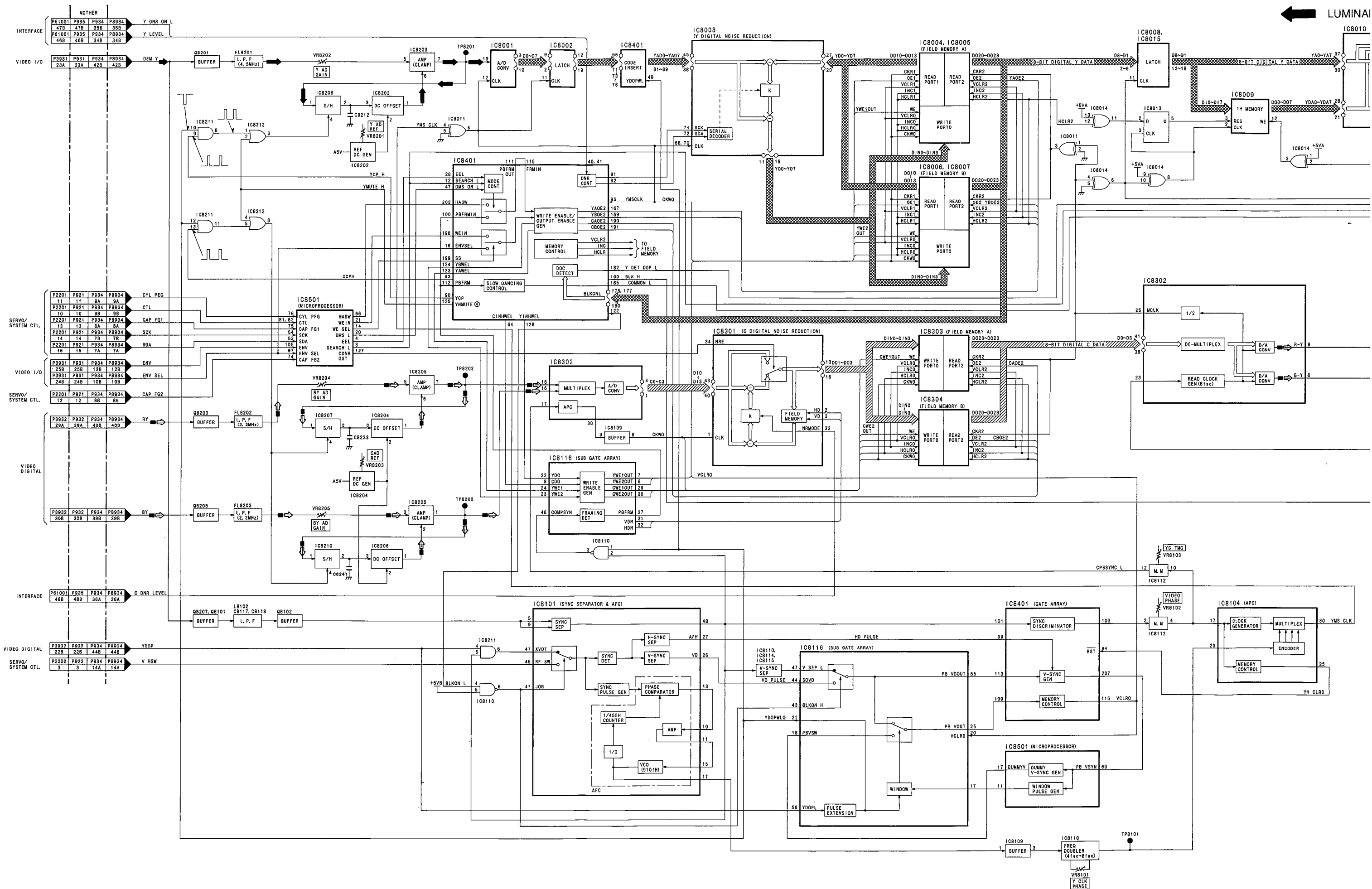




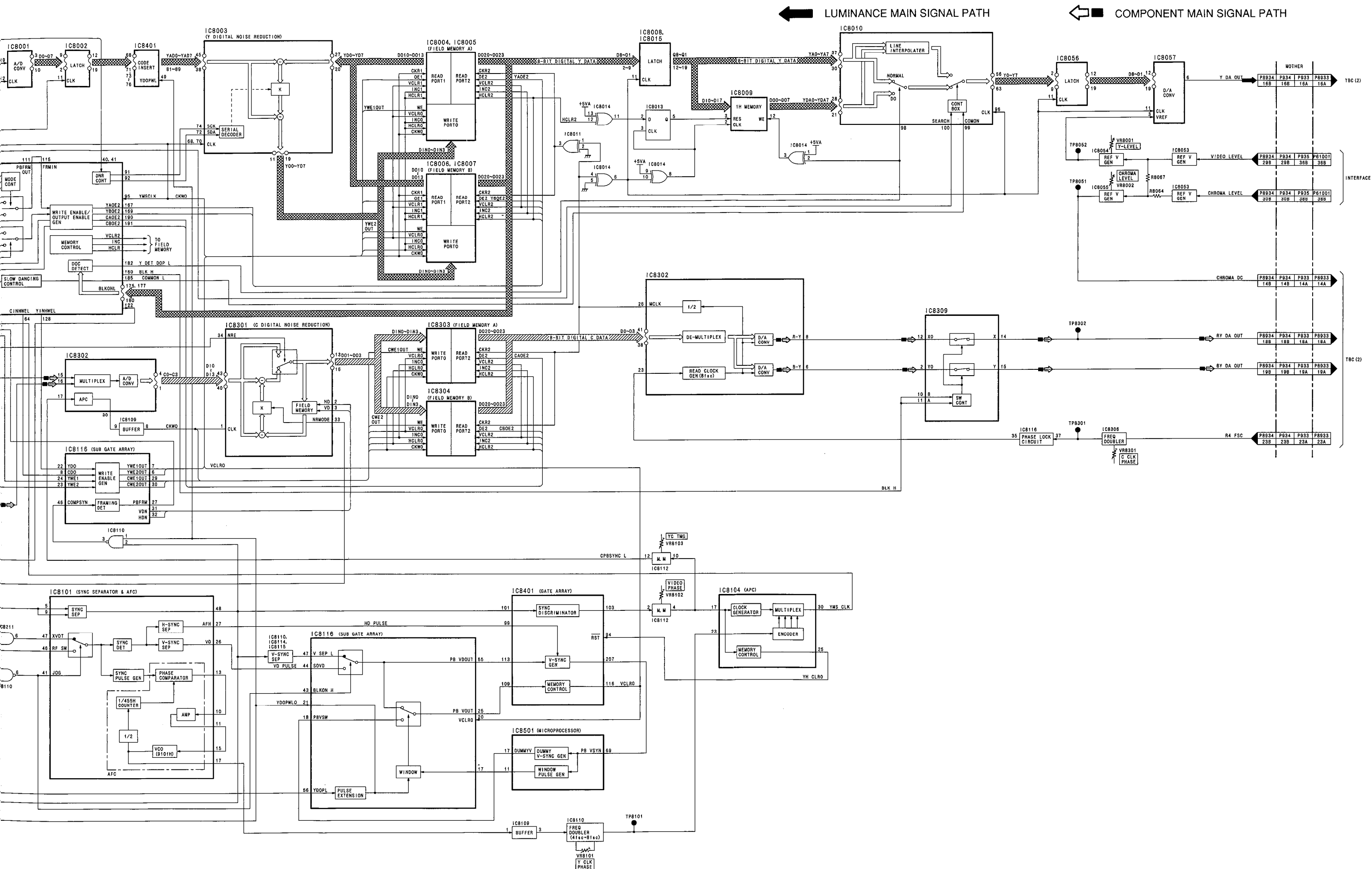




## TBC (1) BLOCK DIAGRAM

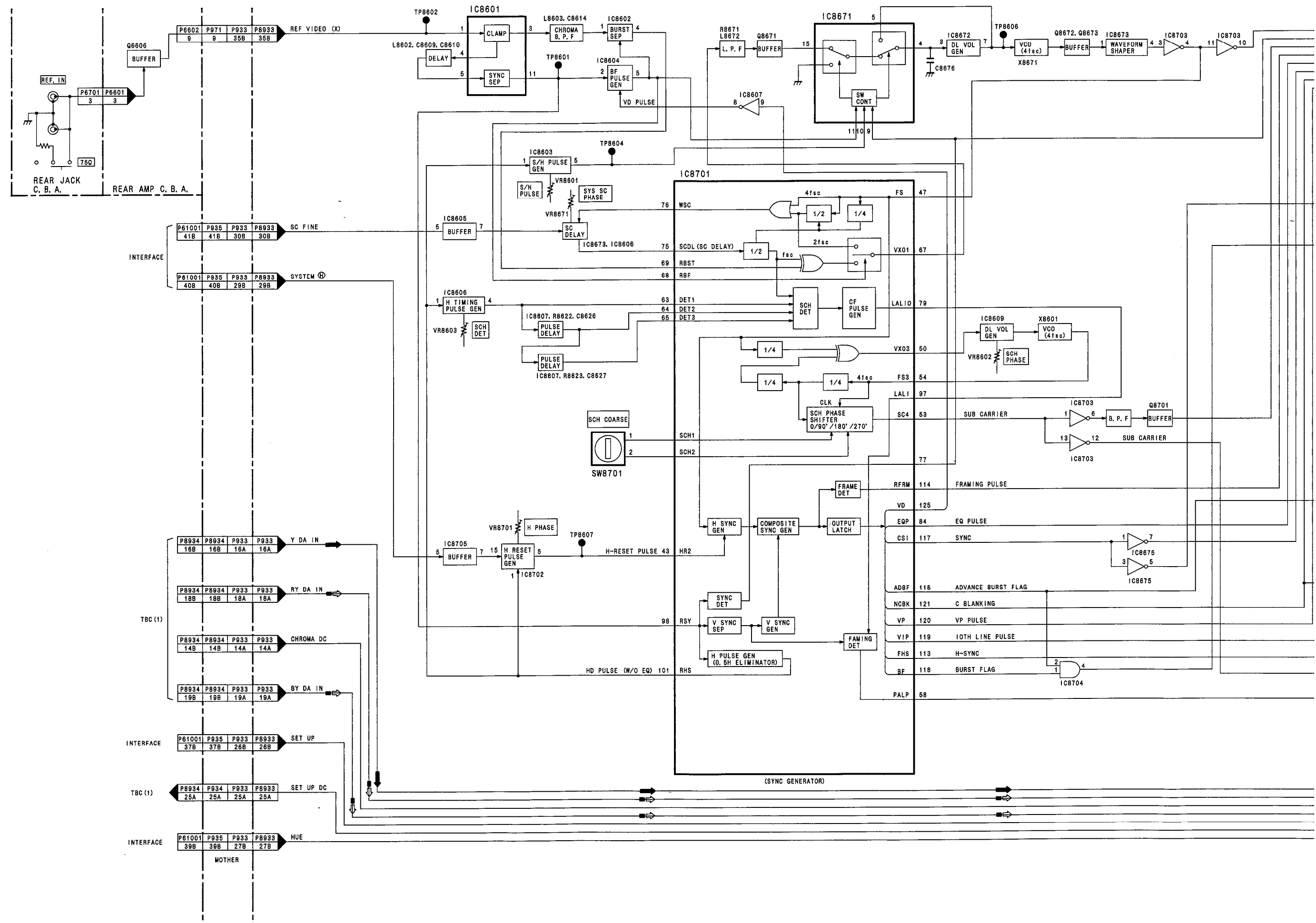




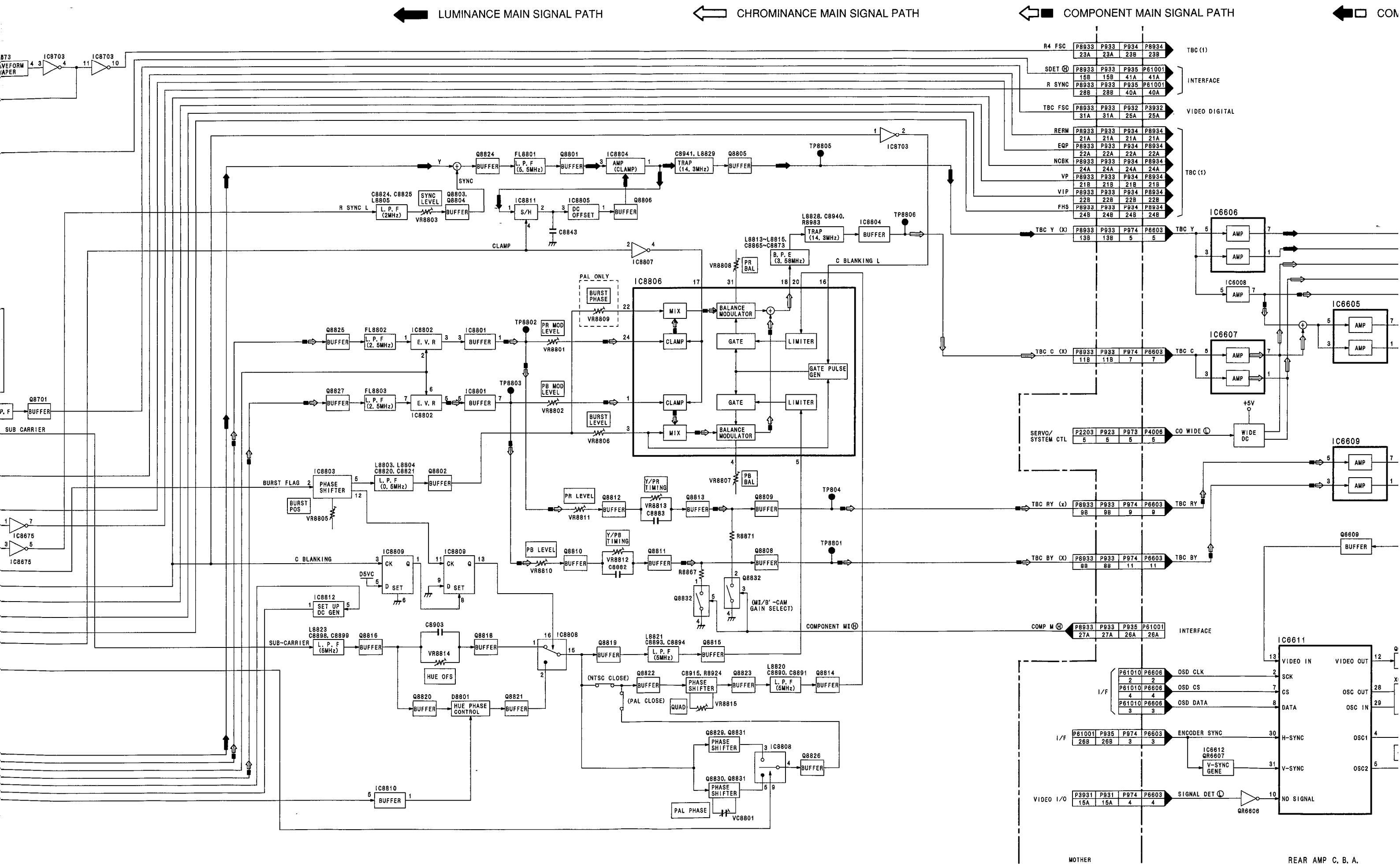




# TBC (2) BLOCK DIAGRAM





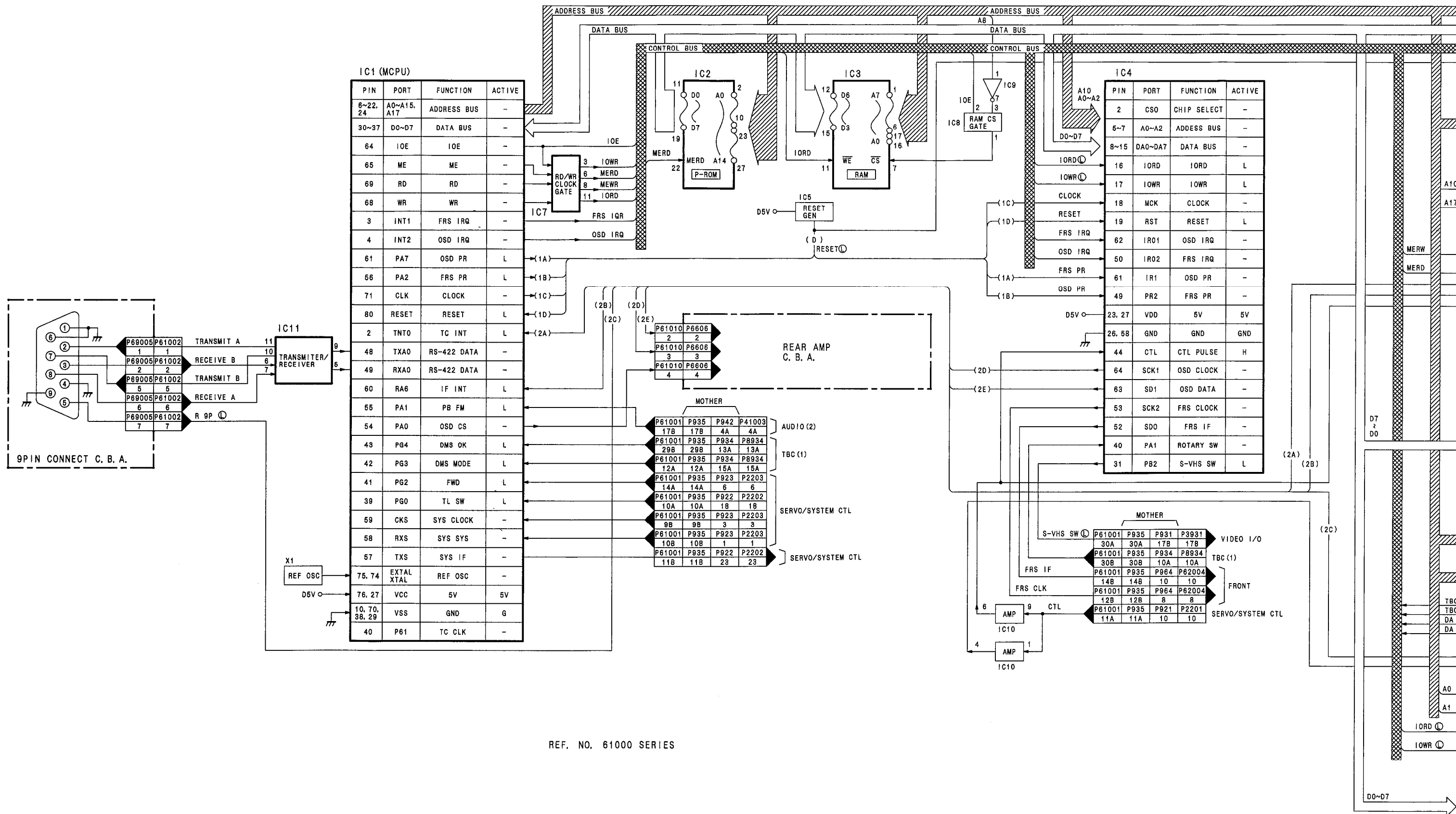




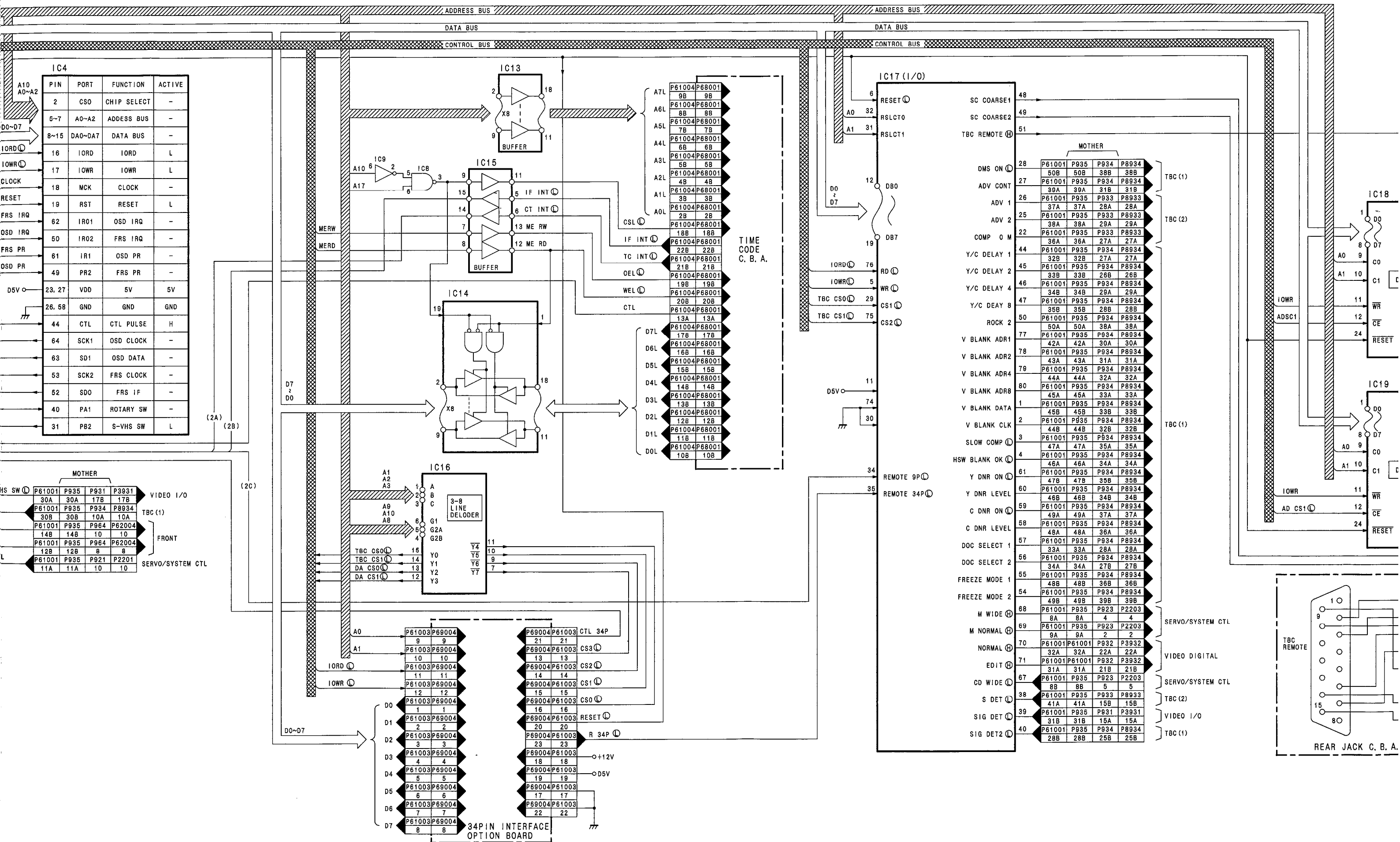




INTERFACE BLOCK DIAGRAM







PIN	PORT	FUNCTION	ACTIVE
2	CS0	CHIP SELECT	-
5~7	A0~A2	ADDRESS BUS	-
8~15	DA0~DAT	DATA BUS	-
16	IORD	IORD	L
17	IOWR	IOWR	L
18	MCK	CLOCK	-
19	RST	RESET	L
62	IR01	OSD IRQ	-
50	IR02	FRS IRQ	-
61	IR1	OSD PR	-
49	PR2	FRS PR	-
23, 27	VDD	5V	5V
26, 58	GND	GND	GND
44	CTL	CTL PULSE	H
64	SCK1	OSD CLOCK	-
63	SD1	OSD DATA	-
53	SCK2	FRS CLOCK	-
52	SD0	FRS IF	-
40	PA1	ROTARY SW	-
31	PB2	S-VHS SW	L

MOTHER			
HS SW	P61001	P935	P931
	30A	30A	17B
	P61001	P935	P934
	30B	30B	10A
	P61001	P935	P964
	14B	14B	10
	P61001	P935	P964
	12B	12B	8
	P61001	P935	P921
	11A	11A	10

VIDEO I/O

TBC (1)

FRONT

SERVO/SYSTEM CTL

P61003		P69004	
9	9	21	21
10	10	13	13
11	11	14	14
12	12	15	15
1	1	16	16
2	2	20	20
3	3	23	23
4	4	18	18
5	5	19	19
6	6	17	17
7	7	22	22
8	8		

34PIN INTERFACE OPTION BOARD

P69004		P61003	
21	21	13	13
13	13	14	14
14	14	15	15
15	15	16	16
16	16	20	20
20	20	23	23
23	23	18	18
18	18	19	19
19	19	17	17
17	17	22	22
22	22		

CTL 34P

CS3

CS2

CS1

CS0

RESET

R 34P

+12V

+5V

IC17 (I/O)			
RESET	6	SC COARSE1	48
RSCT0	32	SC COARSE2	49
RSCT1	31	TBC REMOTE	51
DB0	12		
DB7	19		
RD	76		
WR	5		
CS0	29		
CS2	75		
D0	11		
D7	30		
REMOTE 9P	34		
REMOTE 34P	35		

SC COARSE1

SC COARSE2

TBC REMOTE

DB0

DB7

RD

WR

CS0

CS2

D0

D7

REMOTE 9P

REMOTE 34P

MOTHER			
P61001	P935	P934	P8934
50B	50B	38B	38B
P61001	P935	P934	P8934
39A	39A	31B	31B
P61001	P935	P933	P8933
37A	37A	28A	28A
P61001	P935	P933	P8933
38A	38A	29A	29A
P61001	P935	P933	P8933
36A	36A	27A	27A
P61001	P935	P934	P8934
32B	32B	27A	27A
P61001	P935	P934	P8934
33B	33B	26B	26B
P61001	P935	P934	P8934
34B	34B	29A	29A
P61001	P935	P934	P8934
35B	35B	28B	28B
P61001	P935	P934	P8934
50A	50A	38A	38A
P61001	P935	P934	P8934
42A	42A	30A	30A
P61001	P935	P934	P8934
43A	43A	31A	31A
P61001	P935	P934	P8934
44A	44A	32A	32A
P61001	P935	P934	P8934
45A	45A	33A	33A
P61001	P935	P934	P8934
46A	46A	34A	34A
P61001	P935	P934	P8934
47B	47B	35B	35B
P61001	P935	P934	P8934
46B	46B	34B	34B
P61001	P935	P934	P8934
49A	49A	37A	37A
P61001	P935	P934	P8934
48A	48A	36A	36A
P61001	P935	P934	P8934
33A	33A	28A	28A
P61001	P935	P934	P8934
34A	34A	27B	27B
P61001	P935	P934	P8934
48B	48B	36B	36B
P61001	P935	P934	P8934
49B	49B	39B	39B
P61001	P935	P923	P2203
8A	8A	4	4
P61001	P935	P923	P2203
9A	9A	2	2
P61001	P61001	P932	P932
32A	32A	22A	22A
P61001	P61001	P932	P932
31A	31A	21B	21B
P61001	P935	P923	P2203
8B	8B	5	5
P61001	P935	P933	P8933
41A	41A	15B	15B
P61001	P935	P931	P931
31B	31B	15A	15A
P61001	P935	P934	P8934
28B	28B	25B	25B

TBC (1)

TBC (2)

TBC (1)

TBC (1)

SERVO/SYSTEM CTL

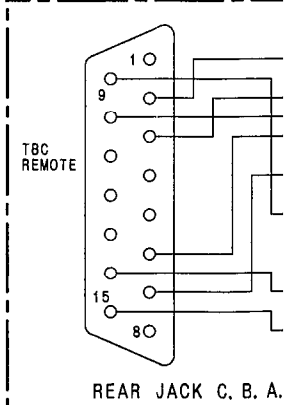
VIDEO DIGITAL

SERVO/SYSTEM CTL

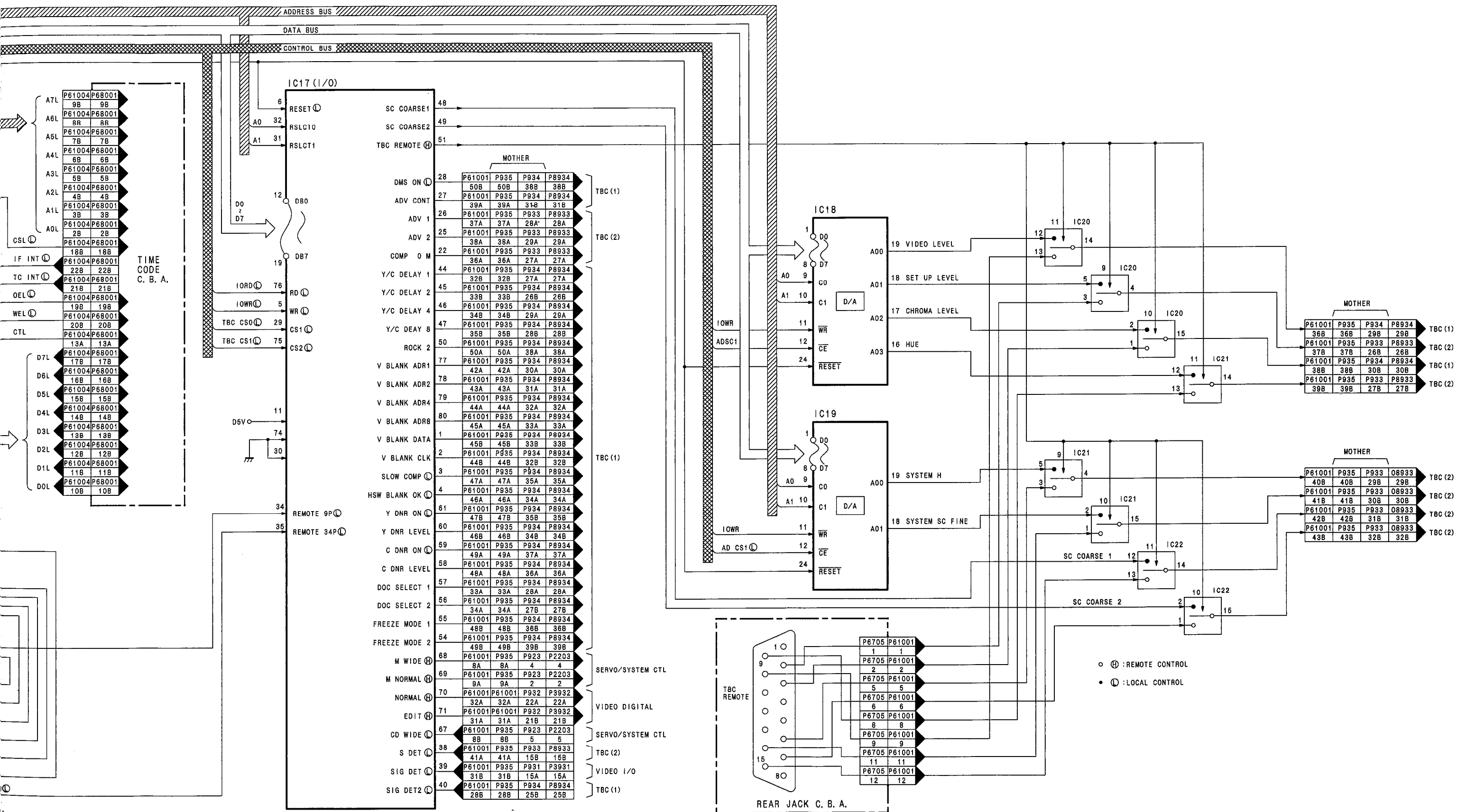
TBC (2)

VIDEO I/O

TBC (1)









# SECTION 9

## SUPPLEMENT

### CONTENTS

#### VOLTAGE TABLE

POWER 1,2 .....	9-2
REEL DRIVE C.B.A. ....	9-2
MIC JACK C.B.A. ....	9-2
HEAD AMP C.B.A. ....	9-2
VIDEO C C.B.A. ....	9-3
VIDEO DIGITAL C.B.A. ....	9-6
SERVO & SYSTEM CONTROL C.B.A. ....	9-11
VIDEO I/O C.B.A. ....	9-18
TBC (1) C.B.A. ....	9-22
TBC (2) C.B.A. ....	9-29
AUDIO (1) C.B.A. ....	9-32
AUDIO (2) C.B.A. ....	9-31
INTERFACE C.B.A. ....	9-37
FRONT C.B.A. ....	9-40
REAR AMP C.B.A. ....	9-41



# POWER 1, 2

Ref. No.	IC1001 (SCM-5)							IC1002 (SCM-5)			Q1001 (SCM-5)				Q1002 (SCM-5)					
Mode	1	2	3	4	5	6	7	K	R	A	1	2	3	4	E	C	B			
STOP	-86.7	-0.1	-0.2	-0.2	14.9	0.2	0.1	4.3	2.3	-0.2	5.4	4.4	0.2	14.9	11.6	13.4	12.2			
REC	-100.8	-0.1	-0.2	-0.2	15.2	0.2	0.1	4.3	2.3	-0.2	5.4	4.4	0.2	15.1	11.3	13.2	12.2			

## REEL DRIVE C.B.A.

Ref. No.	IC2701 (SCM-78)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.4	0.1	1.3	1.4	2.5	2.4	2.5	2.4	2.4	2.5	0	0	4.7	3.4	2.4	2.1	4.1	0.6	1.7	0.1
REC	2.3	0.1	2.5	1.4	2.5	2.5	2.5	2.5	2.5	2.5	0	0	4.7	3.4	2.4	2.2	4.1	0.6	0.7	0.1
Ref. No.	IC2701 (SCM-78)																			
Mode	21	22	23	24																
STOP	0	0.7	0.5	5.1																
REC	0	0.7	1.4	5.2																
Ref. No.	IC2702 (SCM-78)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.5	0.1	2.3	1.4	2.4	2.5	2.5	2.5	2.5	2.4	0	0	4.7	3.4	2.6	2.3	4.1	0.6	0.5	0.1
REC	1.5	0.1	1.5	1.4	2.5	2.5	2.5	2.5	2.5	2.5	0	0	4.7	3.4	2.5	2.3	4.1	0.6	0.5	0.1
Ref. No.	IC2702 (SCM-78)								IC2703 (SCM-78)											
Mode	21	22	23	24	1	2	3	4	5	6	7	8								
STOP	0	0.7	2.3	5.2	0	0.2	0.1	0	0.1	0.1	3.0	4.7								
REC	0	0.7	1.7	5.2	3.5	0.1	0.1	0	0.1	0.1	2.9	4.7								
Ref. No.	IC2704 (SCM-78)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.6	2.4	0	0	0	0	0	0	0	4.7	0.1	2.4	2.4	2.4	2.6	4.7				
REC	2.5	2.4	0	0	0	0	0	0	0	4.7	0.1	2.4	3.1	2.4	2.6	4.7				
Ref. No.	IC2705 (SCM-78)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.1	0.1	4.7	2.2	2.1	2.2	2.1	2.9	2.4	1.8	2.4	0	4.7	0.1						
REC	2.4	2.8	4.7	2.1	2.1	2.1	2.1	2.9	2.4	1.8	2.4	0	4.7	0.1						
Ref. No.	IC2706 (SCM-78)								Q2701 (SCM-78)			QR2701 (SCM-78)								
Mode	1	2	3	4	5	6	7	8	E	C	B	E	C	B						
STOP	4.6	4.6	4.6	0	2.4	2.4	2.4	11.7	2.8	3.8	3.4	0	4.7	0.1						
REC	4.6	4.6	4.6	0	2.4	2.4	2.4	11.7	2.8	3.8	3.4	0	4.7	0.1						

## MIC JACK C.B.A.

Ref. No.	IC4301 (SCM-54)								Q4301 (SCM-54)											
Mode	1	2	3	4	5	6	7	8	E	C	B									
STOP	5.5	5.5	5.5	0	5.6	5.7	5.7	10.9	10.9	11.6	11.6									
REC	5.5	5.5	5.5	0	5.6	5.7	5.7	10.9	10.9	11.6	11.6									

## HEAD AMP C.B.A.

Ref. No.	IC5001 (SCM-77)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.3	0.8	0.6	0	0.6	0.8	4.9	0.8	0.6	0	0.6	0.8	0	0	0	0	0	0	0.6	1.7
REC	2.3	0	0	0	0	0	0.3	0	0	0	0	0	0	5.9	5.8	5.9	11.2	0	2.7	0
Ref. No.	IC5001 (SCM-77)																			
Mode	21	22	23	24	25	26	27	28	29	30										
STOP	0	0	0	4.6	4.9	1.8	3.1	0	1.9	1.9										
REC	4.6	0	4.6	0	0.3	0.3	0.1	0	11.1	3.9										
Ref. No.	IC5002 (SCM-77)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.3	0	2.8	1.2	3.7	4.9	2.9	2.3	4.9	0	0	2.5	0	0	0	0.8	0.7	0	0.7	0.8
REC	4.0	1.3	2.7	1.3	0.1	4.9	3.7	2.3	4.9	0	0	2.5	0	0	0	0	0	0	0	0
Ref. No.	IC5002 (SCM-77)				Q5001 (SCM-77)			Q5002 (SCM-77)			Q5003 (SCM-77)						Q5004 (SCM-77)			
Mode	21	22	23	24	E	C	B	E	C	B	1	2	3	4	5	6	E	C	B	
STOP	0	0	0	0	2.4	0	1.8	0	0	0	0	0	0	0	0	0	0	0	0	
REC	0	7.3	0	0.6	0.3	0	0	0	0	0.8	0	0.7	0	0	0.7	0	0	0	0.8	
Ref. No.	Q5005 (SCM-77)						QR5001 (SCM-77)													
Mode	E	C	B	E	C	B														
STOP	0	0	0.8	0	0	5.0														
REC	0	0	0	0	2.5	0.3														



# VIDEO C C.B.A.

Ref. No.	IC9101 (SCM-17)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.8	3.4	1.4	3.1	0	0	0	5.0	2.4	5.0	2.2	2.4	2.8	2.3	2.0	2.3	2.0	2.1	5.0	2.4
REC	1.8	3.4	1.4	2.9	0	0	0	5.0	2.4	5.0	2.2	2.4	2.8	2.3	2.0	2.3	2.0	2.1	5.0	2.4
Ref. No.	IC9101 (SCM-17)																			
Mode	21	22	23	24	25	26	27	28												
STOP	5.0	0	0	0	2.3	1.3	3.2	1.6												
REC	5.0	0	0	0	2.3	1.3	3.2	1.6												
Ref. No.	IC9102 (SCM-17)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.6	3.2	1.3	2.3	0	0	0	5.0	2.4	5.0	2.1	2.0	2.3	2.0	2.1	2.3	2.0	2.2	5.0	2.4
REC	1.6	3.2	1.3	2.3	0	0	0	5.0	2.4	5.0	2.1	2.0	2.3	2.0	2.1	2.3	2.0	2.2	5.0	2.4
Ref. No.	IC9102 (SCM-17)																			
Mode	21	22	23	24	25	26	27	28												
STOP	5.0	0	0	0	2.3	1.2	3.2	1.6												
REC	5.0	0	0	0	2.3	1.3	3.2	1.6												
Ref. No.	IC9103 (SCM-17)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.0	1.7	1.4	2.8	1.5	2.4	1.8	2.0	1.6	1.4	1.8	3.5	1.4	3.3	2.4	3.2	2.6	2.4	1.6	3.3
REC	5.0	1.6	1.5	3.1	1.6	2.1	1.7	1.7	1.9	1.7	1.9	3.5	1.3	3.2	2.3	3.0	3.2	2.4	1.6	3.2
Ref. No.	IC9103 (SCM-17)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.2	3.0	2.3	2.9	2.4	2.1	0.1	5.0	2.4	5.0	0.1	2.4	2.4	0.3	5.0	0.1	5.0	0.1	0.4	4.9
REC	1.2	2.4	2.2	2.5	2.6	2.1	0.1	5.0	2.7	5.2	0	2.5	2.5	0.3	5.1	0.1	5.1	0.1	0	5.0
Ref. No.	IC9103 (SCM-17)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	4.7	0.5	0.1	0.1	5.0	0.3	0.3	0.3	0.3	0	5.0	0.1	1.9	3.4	2.7	2.6	2.6	2.4	2.4	2.4
REC	4.8	0.4	0.1	0.1	5.1	0.3	0.3	0.3	0.3	0	5.1	0.1	1.9	3.4	2.5	2.4	2.4	2.5	2.4	2.4
Ref. No.	IC9103 (SCM-17)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	2.4	2.4	3.7	3.2	3.1	3.2	3.1	2.6	3.1	1.2	3.6	2.0	0.1	0.1	0.1	0.1	2.8	5.1	5.1	5.1
REC	2.4	2.4	2.4	2.6	2.4	3.2	2.9	2.6	3.2	1.2	3.5	1.9	0.1	0.1	0.1	0.1	2.8	5.1	5.1	5.1
Ref. No.	IC9103 (SCM-17)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0.1	2.4	0.1	0	0	0	0	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0
REC	0	2.4	0.1	0	0	0	0	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0
Ref. No.	IC9104 (SCM-17)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.9	3.4	1.3	3.0	2.4	2.5	3.1	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0	5.0
REC	1.9	3.4	1.3	3.0	2.4	2.5	3.1	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0	5.0
Ref. No.	IC9104 (SCM-17)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
STOP	3.3	4.8	3.8	3.8	3.5	0	4.3	0	4.2	0	4.8	5.0	0	0	0	0				
REC	3.3	4.8	3.8	3.8	3.5	0	4.3	0	4.2	0	4.8	5.0	0	0	0	0				
Ref. No.	IC9105 (SCM-17)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	2.6	2.4	5.0	0	2.3	0	2.8	2.4	2.2	3.0	1.4	3.4	0	1.9	2.1	2.3	2.0	2.0	2.2
REC	0	2.6	2.4	5.0	0	2.3	0	2.8	2.4	2.2	3.0	1.4	3.4	0	1.9	2.1	2.3	2.0	2.0	2.2
Ref. No.	IC9105 (SCM-17)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.3	3.2	1.6	0	3.8	2.6	0	5.0	0	5.0	0	0	0	5.0	5.0	5.0	5.0	2.5	2.3	1.4
REC	1.3	3.2	1.6	0	3.8	2.6	0	5.0	0	5.0	0	0	0	5.0	5.0	5.0	5.0	2.5	2.3	1.4
Ref. No.	IC9105 (SCM-17)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52								
STOP	5.0	5.0	0.3	0.1	4.9	4.8	0.5	0	0	0.2	4.0	5.0								
REC	5.0	5.0	0.3	0.1	4.9	4.8	0.4	0	0	0.2	4.0	5.0								
Ref. No.	IC9201 (SCM-18)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.2	0	5.0	2.7	0	0.1	2.3	5.0	0	2.3	5.0	0	1.5	1.8	1.6	1.6	2.0	5.0	0	1.0
REC	3.2	0	5.0	2.7	0	0.1	2.3	5.0	0	2.3	5.0	0	1.5	1.8	1.6	1.6	2.0	5.0	0	1.0



Ref. No.	IC9201 (SCM-18)																				
Mode	21	22	23	24																	
STOP	2.8	1.5	0.2	2.4																	
REC	2.8	1.5	0.2	2.4																	
Ref. No.	IC9202 (SCM-18)																				
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
STOP	2.9	4.7	2.4	3.0	1.0	4.2	2.1	2.3	2.6	0	2.8	2.8	3.2	4.8	4.7	3.1	0	3.5	0	4.0	
REC	2.9	4.7	2.4	3.0	1.0	4.2	2.1	2.3	2.6	0	2.8	2.8	3.2	4.8	4.7	3.1	0	3.5	0	4.0	
Ref. No.	IC9202 (SCM-18)																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36					
STOP	4.0	0.2	3.8	0.2	4.7	3.1	2.6	3.6	3.6	0	0	0	4.0	2.8	3.8	2.8					
REC	4.0	0.2	3.8	0.2	4.7	3.1	2.6	3.6	3.6	0	0	0	4.0	2.8	3.8	2.8					
Ref. No.	IC9204 (SCM-18)					IC9222 (SCM-18)			IC9401 (SCM-19)												
Mode	1	2	3	4	5	I	G	O	1	2	3	4	5	6	7	8					
STOP	0.2	3.8	0	0.1	4.7	11.5	0	5.0	2.8	0.1	2.8	0	0	4.7	2.1	0					
REC	0.2	3.8	0	0.1	4.7	11.5	0	5.0	2.8	0.1	2.8	0	0	4.7	2.1	0					
Ref. No.	IC9402 (SCM-19)																				
Mode	1	2	3	4	5	6	7	8													
STOP	4.7	2.8	2.5	4.0	0	2.8	0	4.0													
REC	4.7	2.8	2.5	4.0	0	2.8	0	4.0													
Ref. No.	IC9403 (SCM-19)																				
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
STOP	0	2.7	2.5	2.9	2.3	2.7	3.0	1.6	1.8	2.4	2.4	1.8	2.2	2.2	2.8	0	0	1.9	2.8	2.0	
REC	0	2.7	2.5	2.9	2.3	2.7	3.0	1.6	1.8	2.4	2.4	1.8	2.1	2.1	2.8	0	0	1.9	2.8	2.0	
Ref. No.	IC9403 (SCM-19)																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
STOP	2.3	0	5.0	2.8	2.5	2.5	0	0	0	0	0	0	0	0	0	0	2.9	0	2.9	2.7	
REC	2.3	0	5.0	2.8	2.5	2.5	0	0	0	0	0	0	0	0	0	0	2.9	0	2.9	2.7	
Ref. No.	IC9403 (SCM-19)																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56					
STOP	2.7	0	2.4	0	0	3.5	2.1	2.1	2.4	3.5	0	3.1	3.1	3.1	3.1	0					
REC	2.7	2.7	2.4	0	0	3.5	2.1	2.1	2.4	3.5	0	3.1	3.1	3.1	3.1	0					
Ref. No.	IC9404 (SCM-19)																IC9405 (SCM-19)				
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	I	G	O		
STOP	2.3	0.1	1.6	0	1.6	1.6	4.9	2.3	2.3	0	2.3	5.0	4.7	2.3	0	2.3	11.4	0	5.0		
REC	2.3	0.1	1.6	0	1.6	1.6	4.9	2.3	2.3	0	2.3	4.9	4.7	2.3	0	2.3	11.4	0	5.0		
Ref. No.	IC9410 (SCM-19)																				
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
STOP	5.0	3.2	3.2	2.9	2.9	4.0	3.5	5.0	4.0	1.7	4.3	0.1	2.1	2.5	2.4	4.9	0	3.0	2.6	3.0	
REC	5.0	3.2	3.2	2.9	2.9	4.0	3.5	5.0	4.0	1.7	4.3	0.1	2.1	2.5	2.4	4.9	0	3.0	2.6	3.0	
Ref. No.	IC9421 (SCM-19)																				
Mode	21	22	1	2	3	4	5	6	7	8											
STOP	3.5	3.0	3.9	1.8	2.3	0	0	0	0.3	5.0											
REC	3.5	3.0	3.9	1.8	2.3	0	0	0	0.3	5.0											
Ref. No.	Q9101 (SCM-17)				Q9102 (SCM-17)			Q9103 (SCM-18)			Q9201 (SCM-18)			Q9202 (SCM-18)			Q9203 (SCM-18)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	3.6	11.4	4.2	3.7	11.4	4.3	2.2	4.7	3.0	0.9	4.8	1.6	-0.2	4.8	0.5	1.8	4.8	2.4			
REC	3.6	11.4	4.2	3.7	11.4	4.3	2.2	4.7	3.0	0.9	4.8	1.6	-0.2	4.8	0.5	1.8	4.8	2.4			
Ref. No.	Q9204 (SCM-18)			Q9205 (SCM-18)			Q9206 (SCM-18)			Q9401 (SCM-19)			Q9402 (SCM-19)			Q9403 (SCM-19)					
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	0	0	0.6	0	0	0	1.8	0	1.2	-1.8	1.6	-1.0	-0.5	-4.9	-1.2	2.6	4.7	3.2			
REC	0	0	0.6	0	0	0	1.8	0	1.2	-1.8	1.6	-1.0	-0.5	-4.9	-1.2	2.6	4.7	3.2			
Ref. No.	Q9404 (SCM-19)			Q9407 (SCM-19)			Q9408 (SCM-19)			Q9410 (SCM-19)			Q9411 (SCM-19)			IC9413 (SCM-19)					
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	0.9	-4.9	0.2	2.1	4.7	2.8	2.2	4.7	2.8	2.6	4.8	3.2	-1.0	4.7	-0.3	-0.8	4.7	-0.1			
REC	0.9	-4.9	0.2	2.1	4.7	2.8	2.2	4.7	2.8	2.6	4.8	3.2	-1.0	4.7	-0.3	-0.8	4.7	-0.1			
Ref. No.	IC9415 (SCM-19)			Q9416 (SCM-19)			Q9418 (SCM-19)			Q9419 (SCM-19)			Q9420 (SCM-19)			Q9421 (SCM-19)					
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	-0.4	-4.9	-1.0	0.7	3.2	1.4	-1.2	-4.9	-1.8	-1.0	0.9	-0.3	-1.8	-1.8	-2.5	-1.8	-1.8	-4.8			
REC	-0.4	-4.9	-1.0	0.7	3.2	1.4	-1.2	-4.9	-1.8	-1.0	0.9	-0.3	-1.8	-1.8	-2.5	-1.8	-1.8	-4.8			



Ref. No.	QR9402 (SCM-19)			QR9403 (SCM-19)			QR9404 (SCM-19)			QR9405 (SCM-19)			QR9406 (SCM-19)			QR9407 (SCM-19)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	4.7	0	5.4	0	2.9	0.1	0	2.8	0.1	0	0	0.1	4.8	4.8	0.1	4.8	-2.5	4.8		
REC	4.7	0	5.4	0	2.9	0.1	0	2.8	0.1	0	0	0.1	4.8	4.8	0.1	4.8	-2.5	4.8		
Ref. No.	QR9408 (SCM-19)																			
Mode	E	C	B																	
STOP	0	4.8	0.1																	
REC	0	4.8	0.1																	



# VIDEO DIGITAL C.B.A.

9

SUPPLEMENT

Ref. No.	IC3602 (SCM-21)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	4.9	5.1	5.0	0.1	0.1	5.0	0.1	0	5.0	5.0	5.0	0.1	0.1	5.0	5.0				
REC	0	4.9	5.0	5.0	-0.1	0	5.0	0.1	0.1	5.0	5.0	5.0	0.1	0.1	5.0	5.0				
Ref. No.	IC3691 (SCM-21)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	5.1	0.1	5.1	0.1	5.1	0.1	5.0	0.1	5.0	0.5	5.0	5.0	5.0						
REC	5.0	5.1	0.1	5.0	0.1	5.0	0.1	0.1	5.0	5.0	0.2	0.1	5.0	5.0						
Ref. No.	IC3701 (SCM-27)																			
Mode	1	2	3	4	5	6	7	8	9											
STOP	0	0	0	0	0	0	0.1	0	0											
REC	0	0	0	0	0	0	0.1	0	0											
Ref. No.	IC3702 (SCM-27)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	5.0	0	2.5	2.5	0	0	0.1	5.0	5.0	0	4.9	5.0	5.0						
REC	5.0	5.0	0	2.5	2.5	0	0	0.1	5.0	5.0	0	5.0	5.0	5.1						
Ref. No.	IC3703 (SCM-27)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	0	0	5.0	0	5.0	0	0	5.0	5.0	0	5.0	5.0	5.0						
REC	5.0	0.1	0.1	5.1	0	5.1	0	0	5.1	5.1	0.1	5.1	5.1	5.1						
Ref. No.	IC3704 (SCM-27)(SCM-29)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	5.0	0	5.0	0	5.0	0	5.0	0	5.0	5.0	0	0	5.0						
REC	5.0	5.0	0	5.0	0.1	5.0	0	5.0	0	5.0	5.0	0	0	5.0						
Ref. No.	IC3771 (SCM-29)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.1	0	0	-0.8	-0.8	0	-4.9	0	0.1	0.1	0.1	-0.8	0	-0.8	0	4.8				
REC	1.1	0	0	-0.8	-0.8	0	-4.9	0	0.1	0.1	0.1	-0.8	0	-0.8	0	4.8				
Ref. No.	IC3781 (SCM-29)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	4.8	0	1.9	3.6	0	3.7	1.9	3.1	3.6	4.1	4.6	1.7	3.1	0	0.3	2.2	2.4	2.8		
REC	4.7	0	1.9	3.6	0	3.6	1.9	3.1	3.6	4.1	4.6	1.7	3.1	0	0.3	2.3	2.5	2.8		
Ref. No.	IC3782 (SCM-29)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	2.5	2.4	5.0	2.5	2.5	0	2.5	2.5	5.0	2.5	2.5	5.0	5.0						
REC	5.0	2.5	2.4	5.0	2.5	2.5	0	2.5	2.5	5.0	2.5	2.5	5.0	5.0						
Ref. No.	IC3783 (SCM-29)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	5.0	2.5	0.3	5.0	0.3	0.1	0.4	0.3	0.3	2.5	0.1	0.2	0.2	5.0				
REC	0	0	5.0	2.5	0.3	5.0	0.3	0.1	0.4	0.3	0.3	2.5	0.1	0.2	0.3	5.0				
Ref. No.	IC3801 (SCM-23)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.3	2.7	2.1	0.9	2.8	3.4	2.9	4.6	2.3	2.3	2.7	2.2	0.9	2.8	3.4	2.9	0.1	4.9	4.9	2.3
REC	2.3	2.7	2.3	1.2	2.9	3.3	3.0	4.6	2.4	2.3	2.8	2.4	1.2	2.9	3.3	3.0	0.1	4.6	0.2	2.4
Ref. No.	IC3801 (SCM-23)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	2.3	0.1	2.7	2.2	0.9	2.8	3.4	2.1	0.1	2.0	2.8	1.1	1.1	3.8	3.8	3.9	4.1	4.9	0.1	2.3
REC	2.3	0.1	2.8	2.4	1.2	2.9	3.3	2.1	0.1	1.8	3.5	1.1	1.1	3.9	3.8	4.0	4.2	5.0	0.1	2.4
Ref. No.	IC3801 (SCM-23)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.3	2.7	2.2	0.9	2.9	3.4	2.9	2.3	2.3	0.1	2.7	2.3	0.9	2.8	3.4	0.1	2.9	4.6	4.7	3.0
REC	2.2	2.9	2.4	1.2	2.9	3.3	3.0	2.4	2.2	0.1	2.8	2.4	1.2	2.9	3.3	0.1	3.0	4.6	4.7	3.0
Ref. No.	IC3801 (SCM-23)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	3.4	2.8	0.9	2.2	2.7	2.3	2.3	1.6	2.5	2.1	0.7	1.4	2.0	1.5	1.5	0.6	2.7	2.6	2.6	0.9
REC	3.3	2.9	1.2	2.4	2.8	2.3	2.4	1.6	2.4	2.2	0.8	1.5	2.1	1.7	1.6	0.6	2.8	2.7	2.7	0.9
Ref. No.	IC3801 (SCM-23)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0.9	1.9	1.4	0.8	0.9	0.8	0.9	5.0	0.1	0.9	0.9	1.0	1.2	1.7	0.1	0.1	2.3	2.3	2.4	2.3
REC	0.9	2.3	1.3	0.8	0.8	0.8	0.8	5.0	0.1	0.8	0.8	0.9	1.1	1.7	0.1	0.1	2.3	2.4	2.4	2.4



Ref. No.		IC3802 (SCM-23)																			
Mode		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP		1.8	0.7	1.9	0.1	1.8	1.2	1.0	0.9	0.8	0.8	0.8	0.8	0.8	4.2	4.6	0.1	0.1	0.1	2.4	2.4
REC		1.9	0.8	1.9	0.1	1.7	1.0	0.9	0.9	0.9	0.8	0.9	0.8	4.9	4.9	4.9	0.1	0.1	0.1	2.3	2.4
Ref. No.		IC3802 (SCM-23)																			
Mode		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP		2.3	2.3	2.4	0.1	0.1	2.8	2.3	2.3	4.9	2.3	2.7	4.1	3.9	3.7	3.8	1.1	1.1	4.9	0.1	1.5
REC		2.3	2.3	2.3	0.1	0.1	2.8	2.3	2.3	4.9	2.3	2.7	4.1	3.9	3.8	3.8	1.1	1.1	4.9	0.1	3.4
Ref. No.		IC3802 (SCM-23)																			
Mode		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP		3.1	4.6	3.0	3.4	3.0	0.7	1.9	2.3	2.2	2.3	0.1	0.1	0.1	0.1	0.1	4.5	0.1	0.1	4.9	4.5
REC		1.8	4.5	2.9	3.2	2.8	1.2	2.4	2.7	2.2	2.3	0.1	0.1	0.1	0.1	0.1	4.5	0.1	0.1	4.9	4.5
Ref. No.		IC3802 (SCM-23)																			
Mode		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP		4.5	4.5	0.1	4.5	4.5	4.5	4.5	0.4	0.4	0.1	0.1	0.1	0.1	1.0	0.1	2.5	1.6	1.3	1.7	1.5
REC		4.5	4.5	0.1	4.5	4.5	4.5	4.5	0.4	0.5	0.1	0.1	0.1	0.1	1.0	0.1	2.5	1.5	1.7	2.1	1.5
Ref. No.		IC3802 (SCM-23)																			
Mode		81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP		0.6	2.1	2.5	1.6	1.8	1.6	4.9	0.1	1.3	1.3	1.3	1.3	1.3	1.3	0.1	0.3	0.1	0.1	0.2	4.8
REC		0.8	2.1	2.4	1.6	1.7	1.4	4.9	0.1	1.2	1.2	1.2	1.2	1.1	1.2	0.1	0.4	0.1	0.1	0.2	4.7
Ref. No.		IC3803 (SCM-24)																			
Mode		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP		2.1	1.9	1.7	3.7	4.9	0.1	5.0	0.1	0.1	2.3	2.3	0.1	0.1	0.1	4.9	4.9	1.0	2.3	2.3	2.7
REC		2.1	2.1	1.8	3.7	4.9	0.1	4.9	0.1	0.1	2.3	2.3	0.1	0.1	0.1	4.5	0.2	1.0	2.3	2.3	2.7
Ref. No.		IC3803 (SCM-24)																			
Mode		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP		0.1	2.3	0.1	0.9	2.8	0.1	3.4	0.1	2.9	0.1	0.1	2.3	2.3	2.8	2.2	0.9	2.8	3.4	0.1	3.0
REC		0.1	2.3	0.1	1.1	2.9	0.1	3.2	0.1	2.9	0.1	0.1	2.3	2.2	2.8	2.2	1.1	2.9	3.3	0.1	2.9
Ref. No.		IC3803 (SCM-24)																			
Mode		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP		4.9	0.1	0.1	0.3	5.0	0.1	0.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.1	2.0	2.5	2.3
REC		4.9	0.1	0.1	0.4	5.0	0.1	0.1	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	0.1	2.1	2.5	2.4
Ref. No.		IC3803 (SCM-24)																			
Mode		61	62	63	64																
STOP		2.3	2.5	2.4	2.3																
REC		2.4	2.6	2.4	2.3																
Ref. No.		IC3804 (SCM-24)																			
Mode		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP		2.0	2.3	2.3	2.3	2.3	2.3	5.0	0.1	0.1	2.3	2.3	2.3	2.3	4.9	0.1	4.9	3.7	1.7	2.0	2.1
REC		2.0	2.3	2.2	2.2	2.2	2.2	4.9	0.1	0.1	2.2	2.2	2.2	2.2	4.9	0.1	4.9	3.7	1.7	2.1	2.1
Ref. No.		IC3804 (SCM-24)																			
Mode		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP		2.3	2.4	2.6	2.3	2.3	4.8	4.9	0.1	4.5	4.2	1.9	0.1	3.4	2.8	0.9	2.3	2.7	2.7	4.9	0.1
REC		2.2	2.4	2.6	2.3	2.3	4.8	4.9	0.1	4.5	0.2	2.0	0.1	3.3	2.9	1.1	2.3	2.8	2.2	4.9	0.1
Ref. No.		IC3804 (SCM-24)																			
Mode		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP		2.3	2.3	2.3	2.3	0.1	2.3	2.3	2.2	2.1	2.1	0.1	2.3	0.1	2.3	0.1	1.6	2.5	2.1	0.7	1.4
REC		2.3	2.2	2.3	2.3	0.1	2.3	2.2	2.2	2.1	2.1	0.1	2.3	0.1	2.4	0.1	1.6	2.4	2.2	0.8	1.4
Ref. No.		IC3804 (SCM-24)																			
Mode		61	62	63	64																
STOP		2.0	1.5	1.5	0.1																
REC		2.1	1.5	1.5	0.1																
Ref. No.		IC3805 (SCM-24)																			
Mode		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP		0.1	2.0	1.9	1.9	1.9	0.1	1.9	0.1	5.0	0.1	1.8	0.1	2.3	2.3	0.1	0.1	0.1	3.0	1.9	1.8
REC		0.1	1.6	1.6	1.5	1.5	0.1	1.5	0.1	4.9	0.1	1.4	0.1	2.3	2.3	0.1	0.1	0.1	3.4	1.5	1.5
Ref. No.		IC3805 (SCM-24)																			
Mode		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP		0.1	1.8	1.8	1.8	0.1	1.8	0.1	1.8	1.9	1.6	1.3	1.3	0.1	1.3	1.3	1.3	1.3	2.7	2.4	5.0
REC		0.1	1.5	1.5	1.5	0.1	1.5	0.1	1.5	1.6	1.3	1.3	1.3	0.1	1.3	1.3	1.3	1.2	2.7	2.4	4.9



Ref. No.	IC3805 (SCM-24)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.1	2.3	2.2	2.2	2.3	2.3	2.4	0.1	4.9	4.9	5.0	0.1	0.1	0.1	0.1	4.7	2.5	0.1	0.2	5.0
REC	0.1	2.3	2.3	2.3	2.3	2.3	2.3	0.1	2.8	4.9	4.9	0.1	0.1	0.1	0.1	4.7	2.5	0.1	0.2	4.9
Ref. No.	IC3805 (SCM-24)																			
Mode	61	62	63	64																
STOP	0.3	2.6	0.1	2.0																
REC	0.4	2.7	0.1	2.0																
Ref. No.	IC3806 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	1.5	1.3	1.8	1.4	0.6	2.1	2.5	1.6	2.3	0	0	4.8	4.8	3.8	3.8	2.9	4.8	4.8	0
REC	0	1.5	1.7	2.1	1.4	0.8	2.1	2.4	1.6	2.3	0	0	4.8	4.8	3.8	3.8	2.9	4.8	4.8	0
Ref. No.	IC3807 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	1.6	1.6	0.9	0.9	2.6	2.6	2.7	0.6	2.3	0	0	4.8	4.8	3.8	3.7	2.9	4.8	4.8	0
REC	0	1.4	2.2	0.9	0.9	2.7	2.6	2.7	0.7	2.3	0	0	4.8	4.8	3.7	3.7	2.9	4.8	4.8	0
Ref. No.	IC3808 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.0	2.0	2.0	2.7	2.3	0	4.8	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.3	4.8	4.8	2.2	2.2
REC	2.0	2.0	1.9	2.6	2.3	0	4.8	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.3	4.8	4.8	2.2	2.2
Ref. No.	IC3808 (SCM-22)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	2.2	1.9	4.2	0	4.3	0	3.4	0	0	2.3	2.3	2.7	2.2	0.9	2.8	3.4	2.1	2.3	0	4.8
REC	2.2	1.9	4.2	0	4.3	0	3.4	0	0	2.3	2.3	2.7	2.2	1.1	2.9	3.3	2.1	2.3	0	4.8
Ref. No.	IC3808 (SCM-22)																			
Mode	41	42	43	44																
STOP	1.8	1.9	2.0	2.0																
REC	1.7	1.8	1.9	1.9																
Ref. No.	IC3810 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.4	3.4	2.4	3.5	1.9	1.6	0	2.3	1.3	1.9	3.5	3.5	3.5	4.8						
REC	2.4	3.4	2.4	0.3	1.9	1.6	0	2.3	1.3	1.9	3.5	3.5	3.5	4.8						
Ref. No.	IC3811 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.4	2.4	2.4	2.4	0.2	4.6	0	0.2	4.6	2.4	2.4	2.4	2.4	4.8						
REC	2.4	2.4	2.4	2.4	0.3	4.6	0	0.2	4.6	2.4	2.4	2.4	2.4	4.8						
Ref. No.	IC3812 (SCM-22)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	4.7	3.5	4.2	1.8	3.0	0	0	2.1	4.7	3.2	0	3.0	0	1.6	2.2	2.3	3.9	3.9		
REC	4.8	3.5	4.3	1.9	3.1	0	0	2.1	4.8	3.2	0	3.1	0	1.6	2.2	2.4	4.0	4.0		
Ref. No.	IC3813 (SCM-23)										IC3814 (SCM-23)									
Mode	1	2	3	4	5	6	7	8			G	V	O							
STOP	4.9	0.1	4.9	0.1	0.1	4.9	0.1	5.0	0.1	5.0	4.9									
REC	4.9	0.1	4.9	0.1	0.1	4.9	0.1	5.0	0.1	5.0	4.9									
Ref. No.	IC3815 (SCM-24)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.3	1.2	1.3	1.3	1.3	1.3	1.7	1.9	2.5	5.0	5.0	4.7	2.4	2.5	2.4	2.6	0.1	2.2	0.8	2.9
REC	1.2	1.1	1.2	1.2	1.2	1.2	1.5	1.7	2.5	4.9	5.0	4.6	2.3	2.3	2.2	2.8	0.1	2.3	1.2	2.9
Ref. No.	IC3815 (SCM-24)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	3.4	2.9	3.0	3.4	2.9	0.8	2.1	2.6	2.3	2.3	0.1	0.1	4.9	0.1	4.9	1.9	1.7	1.3	5.0	1.3
REC	3.2	2.9	2.9	3.3	2.9	1.2	2.3	2.8	2.2	2.3	0.1	0.1	4.9	0.1	4.9	2.0	1.6	1.3	5.0	1.2
Ref. No.	IC3815 (SCM-24)																			
Mode	41	42	43	44																
STOP	1.3	1.3	1.3	1.3																
REC	1.3	1.2	1.1	1.2																
Ref. No.	IC3816 (SCM-23)																			
Mode	1	2	3	4	5	6	7	8												
STOP	4.5	4.7	2.9	0	2.0	0.1	0.4	4.8												
REC	4.5	4.7	2.9	0	2.0	0.1	0.4	4.8												



Ref. No.	IC3817 (SCM-23)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	4.5	4.9	4.9	4.2	0.4	4.6	0.6	0.1	0.2	4.9	4.9	4.5	0.2	4.9	0.9	5.0				
REC	4.5	5.0	5.0	4.2	0.4	4.6	0.6	0.1	0.2	4.9	4.9	4.5	0.2	4.9	0.9	5.0				
Ref. No.	IC3818 (SCM-23)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.5	5.0	0.5	0.1	4.9	4.9	0.1	4.9	0.2	4.5	4.6	5.0	0.5	5.0						
REC	4.5	5.0	0.5	0.1	5.0	5.0	0.1	4.9	0.1	4.5	4.5	5.0	0.5	5.0						
Ref. No.	IC3901 (SCM-26)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.0	4.6	4.5	0	5.0	0	0	5.1	0	0	0	0	5.0	5.0	0	0	5.0	0	0	0
REC	4.9	4.6	4.5	0	4.9	0	0	5.1	0	0	0	0	5.0	5.0	0	0	4.9	0	0	0
Ref. No.	IC3901 (SCM-26)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0
REC	0	0	0	0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0
Ref. No.	IC3901 (SCM-26)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	0	0	0	0	5.0	0	4.9	0	1.8	2.3	5.0	0	4.6	0.9
REC	0	0	0	0	0	0	0	0	0	0	4.9	0	4.9	0	1.8	2.3	5.0	0	4.6	0.9
Ref. No.	IC3901 (SCM-24)				IC3902 (SCM-26)				IC3903 (SCM-26)											
Mode	61	62	63	64	G	V	O		1	2	3	4	5	6	7	8				
STOP	0	4.9	4.9	0.1	0.1	5.0	5.0		5.0	5.0	5.0	0.1	0.1	0.1	0.1	5.0				
REC	0	4.9	4.9	0.1	0.1	5.0	5.0		5.0	5.0	5.0	0.1	0.1	0.1	0.1	5.0				
Ref. No.	IC3921 (SCM-25)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.0	0.1	5.0	5.0	5.0	5.0	5.0	0.1	5.0	5.0	5.0	5.0	5.0	0.1	0.1	5.0				
REC	5.0	0.1	5.1	5.1	5.1	5.1	5.1	0.1	5.1	5.1	5.0	5.1	5.1	0.1	0.1	5.1				
Ref. No.	IC3922 (SCM-25)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.0	2.1	5.0	5.0	5.0	5.0	5.0	0.1	2.3	5.0	2.4	2.4	2.4	2.4	2.4	5.0				
REC	5.0	2.1	5.0	5.0	5.0	5.0	5.0	0.1	2.5	5.0	2.4	2.4	2.4	2.4	2.4	0.8				
Ref. No.	IC3923 (SCM-25)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.2	2.3	2.3	2.2	2.2	2.3	0.1	0.1	0.1	0.1	2.4	2.4	2.4	5.0						
REC	2.3	2.3	2.4	2.3	2.3	2.4	0.1	0.1	0.1	0.1	2.4	2.4	2.4	5.0						
Ref. No.	IC3924 (SCM-25)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.1	2.5	2.4	2.3	2.3	2.7	2.1	0.9	2.8	3.4	2.0	0.1	4.1	0.1	4.1	4.1	2.0	2.5	2.7	0.6
REC	0.1	2.5	2.4	2.3	2.2	2.7	2.2	1.0	3.0	3.3	2.1	0.1	4.1	0.1	4.1	4.1	2.0	2.4	2.8	0.8
Ref. No.	IC3924 (SCM-25)								IC3925 (SCM-25)											
Mode	21	22	23	24	25	26	27	28	1	2	3	4	5							
STOP	1.9	2.4	1.9	1.9	0	4.1	0.1	5.0	0	2.3	0.1	2.5	5.0							
REC	1.9	2.4	1.9	1.9	0	4.1	0.1	5.0	0	2.3	0.1	2.5	5.0							
Ref. No.	IC3951 (SCM-25)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.9	1.9	2.0	3.0	2.4	0	4.8	0	0	0	0	0	0	0	0	0	4.8	4.8	2.2	2.1
REC	1.7	1.7	1.9	3.1	2.4	0	4.8	0	0	0	0	0	0	0	0	0	4.8	4.8	2.2	2.1
Ref. No.	IC3951 (SCM-25)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	2.2	1.9	2.2	0	4.3	0	3.8	0	0	1.9	1.9	2.4	1.9	0.7	2.6	2.5	2.0	2.4	0	4.8
REC	2.2	1.9	2.2	0	4.3	0	3.8	0	0	1.9	1.9	2.5	2.1	0.9	2.6	2.4	2.0	2.4	0	4.8
Ref. No.	IC3951 (SCM-25)																			
Mode	41	42	43	44																
STOP	1.9	1.9	1.9	1.9																
REC	1.7	1.7	1.7	1.7																
Ref. No.	Q3691 (SCM-21)				Q3693 (SCM-21)				Q3701 (SCM-27)				Q3702 (SCM-27)				Q3703 (SCM-27)			
Mode	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
STOP	0.7	0	0		2.2	0	1.6		2.5	4.9	2.2		0	11.5	0		-5.0	4.8	-4.2	
REC	0.7	0	0		2.2	0	1.6		3.0	4.9	2.2		0	11.5	0.5		-5.0	4.8	-4.2	



Ref. No.	Q3772 (SCM-29)			Q3773 (SCM-29)			Q3774 (SCM-29)			Q3783 (SCM-29)			Q3784 (SCM-29)			Q3801 (SCM-22)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.8	4.8	-0.2	-1.1	4.8	-0.5	-0.2	-4.9	-0.8	0	0	0.6	-0.6	4.8	0	1.3	4.8	1.9		
REC	-0.8	4.8	-0.2	-1.1	4.8	-0.5	-0.2	-4.9	-0.8	0	0	0.6	-0.6	4.8	0	1.3	4.9	1.9		
Ref. No.	Q3802 (SCM-22)			Q3803 (SCM-22)			Q3804 (SCM-22)			Q3805 (SCM-22)			Q3806 (SCM-22)			Q3807 (SCM-22)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.9	3.3	1.6	3.1	4.8	3.2	0.7	3.1	1.4	3.4	4.8	3.1	3.2	4.8	3.8	2.8	4.8	3.4		
REC	0.9	3.3	1.6	3.2	4.8	3.3	0.7	3.1	1.4	3.4	4.8	3.1	3.2	4.8	3.8	2.8	4.8	3.4		
Ref. No.	Q3808 (SCM-22)			Q3809 (SCM-22)			Q3951 (SCM-25)			Q3952 (SCM-25)										
Mode	E	C	B	E	C	B	E	C	B	E	C	B								
STOP	3.7	4.8	4.3	3.5	4.8	4.2	3.2	4.8	3.8	3.7	4.8	4.3								
REC	3.7	4.8	4.3	3.5	4.8	4.2	3.2	4.8	3.8	3.7	4.8	4.3								
Ref. No.	QR3704 (SCM-27)			QR3705 (SCM-27)			QR3772 (SCM-29)			QR3810 (SCM-23)										
Mode	E	C	B	E	C	B	E	C	B	E	C	B								
STOP	0	0	4.5	0.1	0.1	4.1	0.1	5.0	0.1	0.1	0.1	4.9								
REC	0	0	4.5	0.1	0.1	4.1	0.1	5.0	0.1	0.1	0.1	4.9								



# SERVO & SYSTEM CONTROL C.B.A.

Ref. No.	IC1501 (SCM-16)								IC1502 (SCM-16)			IC1503 (SCM-16)			IC1505 (SCM-16)			IC1506 (SCM-16)		
Mode	1	2	3	4	5	6	7	8	G	I	O	G	I	O	K	A	R	K	A	R
STOP	4.7	0.1	2.7	0	2.7	5.3	0.1	5.3	0	-14.7	-12.2	0	-7.0	-5.0	7.7	0	2.5	5.9	0	2.5
REC	4.7	0.1	2.7	0	2.7	5.3	0.1	5.3	0	-14.8	-12.2	0	-7.0	-5.0	7.7	0	2.5	5.9	0	2.5
FF	4.7	0.1	2.7	0	2.7	5.3	0.1	5.3	0	-14.7	-12.2	0	-6.9	-5.0	7.7	0	2.5	5.9	0	2.5
Ref. No.	IC2001 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	5.0	4.6	2.5	2.5	5.1	0	0	0	0	2.5	2.6	0	5.1	0	4.1	5.1	0	5.1	2.6
REC	3.1	5.0	4.6	2.5	2.5	5.1	0	0	0	0	2.6	0	0	5.1	0	4.1	5.1	0	5.1	2.6
FF	0	5.0	4.6	2.5	2.5	5.2	0	5.2	0	0	2.6	2.6	0	5.2	0	4.1	5.2	0	5.2	2.6
Ref. No.	IC2001 (SCM-9)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	5.1	0	2.6	0	0	0	0	5.1	0.1	2.4	0	0	0	0	5.1	0
REC	0	0	0	0	5.1	0	2.6	0	0	0	0	5.1	0.5	2.4	0	0	0	0	5.1	0
FF	0	0	0	0	5.2	0	2.6	0	0	0	0	5.2	0.5	2.4	0	0	0	0	5.2	0
Ref. No.	IC2001 (SCM-9)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	5.1	0	0	0	0	2.5	2.5	0	0.2	0	0	0	0	0	0	1.9	5.1	0
REC	0	0	5.1	0	0	5.1	0	2.5	2.5	0	3.1	0	0	0	0	0	0	1.9	5.1	0
FF	0	0	5.2	0	0	5.2	0	2.5	2.5	0	0	0	0	0	0	0	0	1.9	5.2	0
Ref. No.	IC2001 (SCM-9)				IC2002 (SCM-9)			IC2003 (SCM-9)												
Mode	61	62	63	64	V	G	O	1	2	3	4	5	6	7	8					
STOP	1.1	3.1	5.1	0	5.1	0	5.1	2.3	0.5	2.5	0	0	0	0	5.0					
REC	1.1	3.1	5.1	0	5.1	0	5.1	2.3	0.5	2.5	0	0	0	0	0					
FF	1.1	3.1	5.2	0	5.2	0	5.2	2.3	0.5	2.6	0	0	0	0	5.0					
Ref. No.	IC2004 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	0	0	0	0	2.6	2.6	2.5	2.6	2.6	5.1				
REC	0	0	0	0	0	0	0	0	0	0	2.6	2.6	2.6	2.6	2.6	5.1				
FF	0	0	0	0	0	0	0	0	5.2	0	2.6	2.6	2.6	2.6	2.6	5.2				
Ref. No.	IC2005 (SCM-9)										IC2006 (SCM-9)									
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	
STOP	2.6	2.6	2.1	0	2.6	0	0	0	0	0	0	0	5.1	5.1	2.6	2.6	0	0	5.1	
REC	2.6	2.6	2.1	0	2.6	0	0	0	0	0	0	0	5.1	5.1	2.6	2.6	0	0	5.1	
FF	2.6	2.6	2.1	0	2.6	0	0	0	0	0	0	0	5.2	5.2	2.6	2.6	0	0	5.2	
Ref. No.	IC2007 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	5.1	5.1	0	5.1	5.1	0	0	0	0	5.1	5.1	0	5.1	0	0	5.1
REC	0	0	0	0	4.5	5.1	0	5.1	5.1	0	0	0	0	5.1	5.1	0	5.1	0	0	5.1
FF	0	0	0	0	4.5	5.2	0	5.2	5.2	0	0	0	0	5.2	5.2	0	5.2	0	0	5.2
Ref. No.	IC2007 (SCM-9)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	2.6	0	0	5.1	0	5.1	0	0	0	0	5.1	0	0	0	0	0	5.1
REC	0	0	0	2.6	0	0	5.1	0	5.1	0	0	0	0	5.1	0	0	0	0	0	5.1
FF	0	0	0	2.6	0	0	5.2	0	5.2	0	0	0	0	5.2	0	0	0	0	0	5.2
Ref. No.	IC2007 (SCM-9)																			
Mode	41	42	43	44																
STOP	5.1	5.1	0	2.5																
REC	5.1	5.1	0	2.5																
FF	5.2	5.2	0	2.5																
Ref. No.	IC2008 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0.2	3.5	0	4.7	5.1	0	0	0	0	5.1	5.1	0	5.1	0	0	5.1
REC	0	0	0	0	0	3.5	0	0	5.1	0	0	0	0	5.1	5.1	0	5.1	0	0	5.1
FF	0	0	0	0	0.3	3.5	0	4.7	5.1	0	0	0	0	5.2	5.2	0	5.2	0	0	5.2
Ref. No.	IC2008 (SCM-9)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	2.6	0	0	0	0	0	5.1	0	0	0	0	5.1	0	0	0	0	0	5.1
REC	0	0	2.6	2.6	0	0	0	0	5.1	0	0	0	0	5.1	0	0	0	0	0	5.1
FF	0	0	2.6	2.6	0	0	0	0	5.2	0	0	0	0	5.2	0	0	0	0	0	5.2



Ref. No.	IC2008 (SCM-9)				IC2009 (SCM-9)															
Mode	41	42	43	44	1	2	3	4	5	6	7	8								
STOP	5.1	5.1	0	2.5	2.6	0	0	0	5.1	2.6	2.6	5.1								
REC	5.1	5.1	0	2.5	2.6	0	0	0	5.1	2.6	2.6	5.1								
FF	5.2	5.2	0	2.5	2.6	0	0	0	5.2	2.6	2.6	5.2								
Ref. No.	IC2010 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.5	0.1	5.0	0.5	2.5	0.2	2.5	0	0	0.1	0.3	0	5.1	0						
REC	0.5	0.2	5.0	0.5	2.5	0.2	2.5	0	0	0.1	0.4	0	5.1	0						
FF	0.5	0.2	5.0	0.5	2.5	0.2	2.5	0	0	0.1	0.5	0	5.2	0						
Ref. No.	IC2012 (SCM-9)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.5	2.6	2.6	2.6	2.6	2.6	0	2.4	2.3	2.5	2.4	0.8	3.7	5.1						
REC	2.5	2.6	2.6	2.6	2.6	2.6	0	2.4	2.3	2.5	2.4	0.8	3.6	5.1						
FF	2.6	2.6	2.6	2.6	2.6	2.6	0	2.4	2.3	2.5	2.4	0.8	3.6	5.2						
Ref. No.	IC2013 (SCM-9)								IC2014 (SCM-9)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5							
STOP	0	0	0	0	2.4	2.4	2.4	11.7	2.6	2.6	0	2.5	5.0							
REC	0	0	0	0	2.4	2.4	2.4	11.7	2.6	2.6	0	2.5	5.0							
FF	0	0	0	0	2.4	2.4	2.4	11.7	2.6	2.6	0	2.5	5.0							
Ref. No.	IC2201 (SCM-13)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	5.1	5.1	0	0	0	0	3.1	2.4	2.6	2.1	2.4	5.1	5.1	5.1	5.1	4.9	3.1	4.2
REC	0	0	5.1	5.1	0	0	0	0	3.1	2.4	2.6	2.1	2.4	5.1	5.1	5.1	5.1	4.9	2.8	3.9
FF	0	0	5.2	5.2	0	0	0	0	3.1	2.5	2.7	2.1	2.4	5.2	5.2	5.2	5.2	5.0	3.2	4.3
Ref. No.	IC2201 (SCM-13)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	5.1	5.1	5.1	0	0	5.1	0	0	0	0	0	0	0	0	0	0	0
REC	0	0	0	5.1	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FF	0	0	0	5.2	5.2	5.2	0	5.2	5.2	0	0	0	0	0	0	0	0	0	0	0
Ref. No.	IC2201 (SCM-13)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	5.1	3.9	4.7	4.3	3.5	4.3	3.5	3.6	3.6	3.1	3.6	3.1	4.9	4.7	4.1	3.4	3.9	5.1
REC	0	0	5.1	2.7	2.7	3.6	3.6	3.6	3.7	3.7	3.5	4.5	3.5	2.6	3.7	3.5	3.7	3.8	4.2	5.1
FF	0	0	5.2	2.6	3.3	3.9	3.3	3.3	4.0	3.3	3.5	3.4	3.4	3.3	4.1	2.6	2.8	3.9	2.8	5.2
Ref. No.	IC2201 (SCM-13)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	5.1	5.1	0	0	0	0	0	5.1	5.1	5.1	0	0.9	0.9	0.8	0.9	4.1	4.6	3.8	4.7	4.7
REC	5.1	5.1	0	0	0	0	0	5.1	5.1	5.1	0	2.4	2.8	3.2	2.1	1.9	1.5	3.9	4.6	4.6
FF	5.2	5.2	0	0	0	0	0	5.2	5.2	5.2	0	0.3	0	1.0	0.8	4.5	4.7	3.9	4.7	4.7
Ref. No.	IC2201 (SCM-13)																			
Mode	81	82	83	84																
STOP	0	0	0.5	5.1																
REC	0	0	0.5	5.1																
FF	0	0	0.5	5.2																
Ref. No.	IC2202 (SCM-12)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.0	3.9	0	5.0	0	0	4.0	0	2.6	5.1	5.1	5.1	0	0	5.1	4.5	5.0	0	0	4.6
REC	0	2.7	0	2.6	2.6	2.5	2.5	0	2.5	5.1	0	5.1	0	0	0	4.5	5.0	0	0	4.6
FF	3.3	2.6	0	5.0	0	0	4.1	0.4	2.6	0	0	5.2	0	0	0	4.6	5.0	0	0	4.6
Ref. No.	IC2202 (SCM-12)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.5	4.5	0	5.1	5.1	0.2	0	0	0	0	0	0	5.1	0	0	5.1	5.1	5.1	5.1	5.1
REC	2.3	2.3	0	5.1	0	0.2	0	0	0	0	0	0	5.1	0	5.1	5.1	0	0	5.1	2.2
FF	0.1	4.5	0	5.2	5.2	0.1	0	0	0	0	0	0	5.2	5.2	0	0	0	0	0	0
Ref. No.	IC2202 (SCM-12)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	5.1	2.3	5.1	5.1	5.1	5.1	0	5.1	0	0	0	0	5.1	1.9	1.9	2.2	5.0	3.2	0.5	4.1
REC	2.9	2.3	5.1	2.7	2.7	2.6	2.7	2.6	2.7	2.6	2.7	0	5.1	1.9	1.9	2.2	5.0	2.8	0.6	1.9
FF	0	0	5.2	0	0	0	0	0	0	0	0	0	5.2	1.9	1.9	2.2	5.0	3.2	0.5	4.5



Ref. No.	IC2202 (SCM-12)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0.9	0.8	0.9	0.9	3.9	4.2	4.1	3.8	4.9	3.1	3.6	3.1	5.1	0	3.5	3.5	4.3	4.3	3.5	4.3
REC	2.1	3.2	2.8	2.4	4.2	3.8	3.7	3.5	3.6	2.6	0	4.4	5.1	0	3.6	3.7	3.6	3.6	3.7	3.7
FF	0.8	1.0	0.5	0.3	2.7	3.9	4.1	2.8	4.1	3.3	3.4	3.4	5.2	0	3.3	3.3	4.0	3.3	3.3	3.3
Ref. No.	IC2203 (SCM-12)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	5.1	5.1	5.1	5.1	0	5.1	5.1	0	5.1	5.1	0	0	5.1	0	1.6	1.6	0	0
REC	0	5.1	5.1	0	0	5.1	3.8	2.2	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.6	0.6	0	0
FF	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ref. No.	IC2203 (SCM-12)								IC2206 (SCM-12)											
Mode	21	22	23	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STOP	0	0	5.1	-5.0	5.1	5.1	4.6	0	0	5.0	5.0	0	0	0	0	0	0	4.6	5.1	0
REC	0	0	5.1	-5.0	5.1	2.5	2.3	0	0	5.0	5.0	0	0	0	0	0	0	2.3	2.6	0
FF	0	0	0	-5.0	5.2	0	0.1	2.8	2.4	5.1	5.1	0	0	0	0	0	0	0.1	0	0
Ref. No.	IC2207 (SCM-12)								IC2302 (SCM-10)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	1.6	1.6	1.6	-5.0	0.3	0.3	4.0	5.1	0.1	0	0	-5.0	0	0	-0.1	5.0				
REC	2.1	1.6	1.6	-5.0	0.3	0.3	4.0	5.1	0	0	0	-5.0	0	0	-0.1	5.0				
FF	2.4	1.6	1.6	-5.0	0.3	0.3	4.0	5.2	0.6	0	0	-5.0	0	0	-0.1	5.0				
Ref. No.	IC2303 (SCM-10)								IC2304 (SCM-10)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	-0.2	0	0	-5.0	0.3	0.2	3.9	5.0	4.9	0.1	0.9	-5.0	0.9	-0.2	4.9	5.0				
REC	0	0	0	-5.0	0.3	0.3	3.9	5.0	4.9	0	0.9	-5.0	0.9	0	4.9	5.0				
FF	-1.5	-0.1	0	-5.0	0.3	0.3	3.9	5.0	3.6	0	0.7	-5.0	0.7	-1.4	1.4	5.0				
Ref. No.	IC2305 (SCM-10)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	5.0				
REC	0	0	0.1	0.1	0.1	0	0	0	0	0	4.6	0	3.1	3.0	0	5.0				
FF	1.9	2.7	0.1	0.1	0.1	0	0	0	0	0	0	0.4	0	2.0	0.4	5.0				
Ref. No.	IC2310 (SCM-10)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	1.3	0.2	0	0.9	4.4	0	0	0	0	0	5.0	3.4	2.6	1.7	5.1				
REC	0	1.3	0.2	0	0.9	4.4	0	0	0	0	2.5	0.3	0.4	2.6	3.8	5.1				
FF	0	1.3	0.2	0	0.9	4.4	0	0	0	0	0	5.0	3.4	2.6	1.7	5.0				
Ref. No.	IC2311 (SCM-10)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-5.0	0	0	0	0	0	5.9	0	0	11.7				
REC	0	0	0	0	0	0	-5.0	0	11.7	0	11.7	0	0	0	0	11.7				
FF	0	0	0	0	0	0	-5.0	0	0	0	0	0	5.9	0	0	11.7				
Ref. No.	IC2312 (SCM-10)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	11.6	11.6	11.6	11.7	0	0	0	0	0	0	0	11.7	11.7						
REC	11.7	0	4.6	0	11.7	0	0	0	0	0	0	0	11.7	11.7						
FF	0	11.6	11.6	11.6	11.7	0	0	0	0	0	0	0	11.7	11.7						
Ref. No.	IC2401 (SCM-11)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	5.1	0	5.1	5.1	0	0	0	0	0	0	0	5.1	5.1						
REC	5.1	0	3.1	0.1	5.1	0	0	0	0	0	0	5.1	0	5.1						
FF	0	5.1	0	5.2	5.2	0	0	2.7	0	1.9	0	2.0	3.1	5.1						
Ref. No.	IC2402 (SCM-11)								IC2403 (SCM-11)					IC2404 (SCM-11)						
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	1	2	3	4	5		
STOP	0	0	0	0	5.1	0	0	5.1	5.1	0	0	0	5.1	5.1	0	0	0	5.1		
REC	3.1	0	0	0	0	0	3.1	5.1	0.1	2.1	0	3.1	5.1	0.4	3.1	0	2.1	5.1		
FF	3.1	0	0	0	5.2	3.2	0	5.2	5.2	0	0	0	5.2	0	5.2	0	0	5.2		
Ref. No.	IC2405 (SCM-11)																			
Mode	1	2	3	4	5															
STOP	5.1	5.1	0	5.1	5.1															
REC	3.1	1.8	0	0.4	5.1															
FF	3.2	0	0	0	5.2															



Ref. No.	IC2406 (SCM-11)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.1	5.1	0	0	5.1	0	5.1	5.1	5.1	3.6	0	5.1	0	0	0	5.1	5.1	5.1	0	5.1
REC	5.1	3.1	0	0	5.1	0	5.1	5.1	5.1	3.3	0	1.8	3.1	0	0	0	5.1	3.1	0	5.1
FF	5.2	3.1	0	0	5.1	0	5.2	5.1	5.1	5.1	0	5.2	5.2	0	0	5.2	5.2	3.2	0	5.2
Ref. No.	IC2406 (SCM-11)																			
Mode	21	22	23	24	25	26	27	28	29	30										
STOP	4.8	0	0	0	0	0	2.5	2.5	0	5.1										
REC	4.8	0	0	0	0	0	2.5	2.5	0	5.1										
FF	4.8	0	0	0	0	0	2.5	2.5	0	5.2										
Ref. No.	IC2501 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	3.2	3.2	3.1	11.7	2.4	2.4	2.0	4.6	4.6	4.6	0	2.4	2.4	2.4						
REC	2.5	2.5	2.5	11.7	2.4	2.4	2.2	4.6	4.6	4.6	0	2.4	2.4	2.4						
FF	2.4	2.4	2.3	11.7	2.4	2.4	2.3	0.6	0.6	0.6	0	0.2	0.2	0.2						
Ref. No.	IC2502 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.4	2.4	2.4	11.7	2.4	2.4	2.4	2.4	2.4	2.4	0	1.6	1.7	1.7						
REC	2.4	2.4	2.3	11.7	2.4	2.4	2.4	2.4	2.4	2.4	0	1.0	1.0	1.0						
FF	3.8	3.8	3.8	11.7	2.4	2.4	1.5	2.8	2.7	2.7	0	1.6	1.6	1.5						
Ref. No.	IC2503 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8												
STOP	11.6	2.2	2.4	0	0.5	0.5	0	11.7												
REC	11.6	2.2	2.4	0	0.5	0.5	0	11.7												
FF	11.6	2.3	2.4	0	0.5	0.5	0	11.7												
Ref. No.	IC2505 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.4	2.4	2.0	2.0	2.4	0	0	0	11.6	0	11.6	2.4	2.4	2.4	2.4	11.7				
REC	2.4	2.4	2.2	2.2	2.4	0	0	0	11.6	0	11.6	2.4	2.4	2.4	2.4	11.7				
FF	2.4	2.4	2.3	2.3	2.4	0	0	0	11.6	0	0	2.4	2.4	2.4	2.4	11.7				
Ref. No.	IC2506 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.3	2.1	2.1	2.3	2.3	0	0	0	11.6	0	2.6	2.6	2.4	2.5	2.4	11.7				
REC	2.3	2.2	2.2	2.3	2.3	0	0	0	11.6	0	2.5	2.5	2.4	2.5	2.4	11.7				
FF	2.3	2.3	2.3	2.3	2.3	0	0	0	0	0	2.3	2.4	2.4	2.3	2.3	11.7				
Ref. No.	IC2507 (SCM-8)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.4	0.1	0.3	0.3	0.3	0	0	0	0	0	0	0.2	0.2	0.2	0.1	11.7				
REC	0.8	0.1	0.3	0.3	0.3	0	0	0	0	0	0	0.3	0.3	0.3	0.1	0				
FF	0.1	1.8	0.3	0.3	0.3	0	0	0	0	11.6	0	0.3	0.3	0.3	0	11.7				
Ref. No.	IC2701 (SCM-15)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	14.9	2.9	3.3	3.0	18.9	2.9	3.2	3.2	14.1	0	0.2	0	1.8	2.7	0.5	0.2	0.5	0.4	0	0
REC	14.9	2.9	3.3	3.0	18.1	2.9	3.2	3.2	14.5	0.4	0.4	0	2.1	2.8	0.5	0.4	0.5	0.4	0	0
FF	14.9	2.8	2.9	2.9	17.8	2.7	2.7	2.7	10.1	0.3	0.4	0	1.8	2.7	0.5	0.3	0.5	0.3	0	0
Ref. No.	IC2701 (SCM-15)																			
Mode	21	22	23	24																
STOP	2.6	2.5	2.9	2.7																
REC	2.6	2.5	2.9	2.7																
FF	2.6	2.5	2.9	2.8																
Ref. No.	IC2703 (SCM-14)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.7	14.7	0.4	1.1	0	2.5	2.4	0.6	0.5	2.6	5.0	3.6	3.6	3.6	1.1	14.9	14.7	0.1		
REC	14.7	14.7	0.4	1.1	0	2.5	2.4	0.6	0.5	2.6	5.0	3.6	3.6	3.6	1.1	15.0	14.7	0.1		
FF	14.7	14.8	0.4	1.1	0	2.5	2.4	0.6	0.5	2.6	5.0	3.6	3.6	3.6	1.1	14.9	14.7	0.1		
Ref. No.	IC2704 (SCM-14)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	9.4	0	9.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9	2.6	0	4.7	3.4	2.4	2.4	0.2	0	0	0
REC	0.9	0	0.9	1.4	1.9	1.9	1.9	1.9	1.9	1.9	0	0	4.7	3.4	2.4	2.1	2.8	0.6	0.4	0.1
FF	9.4	0	9.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9	2.6	0	4.7	3.4	2.4	2.4	0.2	0	0	0



Ref. No.	IC2704 (SCM-4)				IC2705 (SCM-14)								IC2706 (SCM-14)							
Mode	21	22	23	24	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
STOP	0	0	9.4	4.0	0	3.2	1.7	0	2.2	0.5	5.0	5.0	3.2	1.9	1.9	0	1.9	1.9	0.5	5.0
REC	0	0.7	1.0	4.0	2.6	2.0	2.0	0	2.0	2.0	2.6	5.0	2.0	1.9	1.9	0	1.9	1.9	2.0	5.0
FF	0	0	9.4	16.5	5.0	0.6	2.2	0	2.2	1.0	5.0	5.0	0.6	1.9	1.9	0	1.9	1.9	1.0	5.0
Ref. No.	IC2707 (SCM-14)								IC2708 (SCM-14)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	4.2	2.5	2.5	0	2.4	2.5	0	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
REC	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
FF	4.1	2.5	2.5	0	2.5	2.5	0	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
Ref. No.	IC2709 (SCM-14)								IC2710 (SCM-14)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0.1	2.5	2.4	0	2.4	2.5	4.5	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
REC	2.3	2.5	2.5	0	2.5	2.5	2.3	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
FF	0.1	2.5	2.4	0	2.4	2.5	4.5	5.0	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0				
Ref. No.	IC2711 (SCM-14)								IC2715 (SCM-14)											
Mode	1	2	3	4	5	6	7	8	I	G	O									
STOP	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	18.4	0	12.0									
REC	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	18.4	0	12.0									
FF	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0	18.3	0	12.0									
Ref. No.	IC60001 (SCM-6)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0.1	0	0	0	0	0	0	11.5	4.6	0.2	0.2	5.0	1.7	0				
REC	0	0	0.1	0	0	0	0	0	0	0	4.6	0.2	0.2	5.0	1.7	5.0				
FF	0	0	0.1	0	0	0	0	0	0	11.5	4.6	0.4	0.4	5.0	1.7	5.0				
Ref. No.	IC60002 (SCM-6)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.8	4.8	0	0	0	0	0	0	0	0	0	0	4.9	0	0	4.9	0	4.7	4.9	0
REC	0.8	4.8	0	0	0	0	4.8	4.7	4.8	0	3.2	3.2	4.9	0	0	4.9	0	4.7	4.9	0
FF	0.9	0	0	0	0	0	0	0	0	0	0	0	4.9	0	0	4.9	0	4.8	4.9	0
Ref. No.	IC60002 (SCM-6)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.5	0	0	0.1	4.7	0.1	2.5	0	4.9	4.9	1.5	---	0	0	4.8	4.9	4.9	0	0	0
REC	4.5	0	0	0	2.8	2.3	2.6	2.5	4.9	4.9	1.5	---	0	0	4.8	4.9	4.9	0	0	0
FF	4.6	0	0	0.1	2.5	2.2	2.6	5.2	0	0	0	---	0	0	4.9	4.9	4.9	0	0	4.9
Ref. No.	IC60002 (SCM-6)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	4.8	4.8	4.8	4.8	0	4.8	0	5.0	4.6	0.2	0.3	4.7	4.5	4.9	4.8	0	0	0	0	0
REC	4.8	4.8	4.8	4.8	0	4.8	0	5.0	4.6	0.2	0.2	4.8	4.5	4.9	4.8	0	0	0	0	0
FF	4.9	0	4.9	4.9	4.9	4.9	4.9	5.0	4.7	0.2	0.2	4.8	4.5	4.9	0	4.9	0	0	0	0
Ref. No.	IC60002 (SCM-6)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	1.1	0.9	1.6	2.3	2.3	2.5	4.6	2.4	2.6	0.6	3.8	4.8	4.8	4.7	0.5	4.2	0	0.1	0	0
REC	1.1	0.9	1.0	2.3	2.3	2.5	4.6	2.4	2.6	0.6	3.8	4.9	4.9	4.8	0.5	4.3	0	0.1	0	0
FF	0.7	0.9	1.0	3.7	3.1	0	0.6	0.2	2.6	0.6	3.8	4.9	4.9	4.9	0.5	4.3	0	0.1	0	0
Ref. No.	IC60002 (SCM-6)				IC60003 (SCM-6)				IC60007 (SCM-6)											
Mode	81	82	83	84	V	G	O	1	2	3	4	5	6	7	8					
STOP	0	0	0	4.5	4.9	0	4.9	1.6	0.3	0.3	0	1.6	1.1	4.0	5.1					
REC	0	0	0	4.5	4.8	0	4.8	1.5	0.3	0.3	0	1.6	1.1	4.0	5.1					
FF	0	0	0	4.6	4.9	0	4.9	1.5	0.3	0	0	1.6	1.1	4.0	5.2					
Ref. No.	IC60101 (SCM-6)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	3.8	3.8	3.8	11.5	1.0	1.0	1.0	2.4	2.4	2.4	0	0.3	0.3	11.4						
REC	3.8	3.8	3.8	11.5	1.0	1.0	1.0	2.4	2.4	2.4	0	0.4	0.4	10.3						
FF	3.8	3.8	3.8	11.5	1.0	1.0	1.0	2.4	2.4	2.4	0	0.3	0.3	10.3						
Ref. No.	IC60501 (SCM-7)								IC60502 (SCM-7)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9	10		
STOP	4.9	2.9	3.2	0	3.2	2.9	4.9	5.1	0	0.2	0.2	0	0	0	12.9	10.3	12.9	0.2		
REC	4.8	2.9	3.2	0	3.2	2.9	4.8	5.1	0	0.2	0.2	0	0	0	12.9	10.3	12.9	0.2		
FF	4.9	2.9	3.2	0	3.2	2.9	4.9	5.2	0	0.2	0.2	0	0	0	12.9	10.3	12.9	0.2		



Ref. No.	IC60503 (SCM-7)			CYLSERVO IC2016 (SCM-7)																
Mode	V	G	O	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
STOP	5.0	0	5.0	0	5.1	0	0	0	0	5.1	0	5.1	0	5.1	2.6	2.6	5.1	0	5.1	
REC	5.0	0	5.0	0	5.1	0	0	0	0	5.1	0	5.1	0	5.1	2.6	2.6	5.1	0	5.1	
FF	0	5.2	5.2	0	5.2	0	0	0	0	5.2	0	5.2	0	5.2	2.6	2.6	5.2	0	5.2	
Ref. No.	Q1501 (SCM-16)			Q1502 (SCM-16)			Q1503 (SCM-16)			Q1504 (SCM-16)			Q1505 (SCM-16)			Q2001 (SCM-9)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	5.1	5.4	5.7	0	5.3	-3.0	14.8	18.3	15.4	13.0	13.6	13.5	12.0	13.0	12.3	3.5	5.1	3.8		
REC	5.1	5.4	5.7	0	5.6	-3.0	15.0	18.5	15.5	13.0	13.4	13.5	12.0	12.9	12.3	3.5	5.1	3.8		
FF	5.1	5.4	5.7	0	4.7	-3.0	15.0	18.1	15.4	13.0	13.5	13.5	12.0	12.9	12.3	3.5	5.1	3.8		
Ref. No.	Q2302 (SCM-10)			Q2303 (SCM-10)			Q2304 (SCM-10)			Q2305 (SCM-10)			Q2703 (SCM-15)			Q2704 (SCM-15)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	11.7	0	0	0	0.6	0	3.5	0.5	1.2	5.0	1.7	4.0	2.8	4.0	18.2	18.4	18.0		
REC	0	5.6	0.3	0	0	0.3	0.7	0.8	1.3	3.2	5.0	3.7	4.0	2.8	4.0	18.5	11.0	18.3		
FF	0	11.7	0	0	0	0.6	0	3.5	0.5	1.2	5.0	1.7	16.4	2.8	15.8	18.3	4.2	17.7		
Ref. No.	Q2705 (SCM-15)			Q2706 (SCM-15)			Q2707 (SCM-15)			Q2709 (SCM-15)			Q2710 (SCM-15)			Q2711 (SCM-15)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	15.5	0.2	0	0.2	0.4	0	17.5	0.1	18.2	12.0	18.0	18.2	12.1	18.0	17.5	3.7	17.5		
REC	0	17.8	0.1	0	0.1	0.5	0	17.5	0.1	18.5	15.7	18.3	18.5	12.5	18.3	17.5	4.0	17.5		
FF	0	17.1	0	0	0	0.7	0	17.4	0.1	18.4	17.0	18.0	18.3	8.0	17.9	17.4	4.0	17.4		
Ref. No.	Q2713 (SCM-15)			Q2714 (SCM-15)			Q2715 (SCM-15)			Q2716 (SCM-15)			Q60001 (SCM-6)			Q60002 (SCM-6)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	2.9	2.9	2.4	2.9	2.9	2.4	5.2	2.9	5.2	5.1	2.9	5.3	0.5	13.0	0.4	12.2	0	12.7		
REC	3.0	3.0	2.4	3.0	2.9	2.4	5.2	2.9	5.1	5.2	2.9	5.7	0.5	13.0	0.4	12.1	0	12.6		
FF	15.0	2.6	15.3	9.7	2.7	8.2	15.3	2.9	15.9	10.0	2.7	9.7	0.6	13.0	0.4	12.1	0	12.6		
Ref. No.	Q60003 (SCM-6)			Q60004 (SCM-6)			Q60005 (SCM-6)			Q60006 (SCM-6)			Q60007 (SCM-6)			Q60008 (SCM-6)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	12.8	0	12.3	0	0	0	0	0.1	0	0	4.9	0.1	0	4.6	0.1	0	0.1	0.1		
REC	12.8	0	12.3	0	0	0	0	0	0	0	4.9	0	0	4.6	0.1	0	12.3	-0.7		
FF	12.8	0	12.3	0	0	0	0	0	0	0	4.9	0	0	4.6	0.2	0	0.2	0.2		
Ref. No.	Q60501 (SCM-7)			Q60502 (SCM-7)			Q60503 (SCM-7)			Q60504 (SCM-7)			Q60505 (SCM-7)			Q60506 (SCM-7)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.6	0.6	1.2	0.6	1.2	0.4	4.2	4.8	4.8	5.0	4.8	4.2	0	0	0.8	0	0	0.7		
REC	0.6	0.6	1.2	0.6	1.2	0.4	4.2	4.8	4.8	5.0	4.8	4.2	0	0	0.8	0	0	0.7		
FF	0.6	0.6	1.2	0.6	1.2	0.4	0	0.4	0	5.2	-0.4	5.2	0	14.9	0	0	0	0		
Ref. No.	Q60507 (SCM-7)			Q60508 (SCM-7)			Q60509 (SCM-7)													
Mode	E	C	B	E	C	B	E	C	B											
STOP	0	14.8	0	14.9	1.4	14.8	0	4.9	0.2											
REC	0	14.8	0	14.9	1.4	14.8	0	4.8	0.2											
FF	0	14.8	0	14.9	0	14.8	0	4.9	0											
Ref. No.	QR1502 (SCM-16)			QR1503 (SCM-16)			QR2003 (SCM-9)			QR2005 (SCM-9)			QR2304 (SCM-10)			QR2305 (SCM-10)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	5.5	0.1	4.7	0	0	0	0	2.0	0.8	0	4.9	0.6	5.0	0	4.9	5.0	0	4.9		
REC	5.5	0.1	4.7	0	0	0	0	2.0	0.8	0	4.9	0.6	5.0	0	4.9	5.0	0	4.9		
FF	5.5	0.2	4.7	0	0	0	0	2.0	0.8	0	4.9	0.6	5.0	2.7	-0.2	5.0	1.9	1.4		
Ref. No.	QR2306 (SCM-10)			QR2308 (SCM-10)			QR2309 (SCM-10)			QR2310 (SCM-10)			QR2311 (SCM-10)			QR2312 (SCM-10)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	5.0	0	5.0	1.0	5.0	0	0	0	0	0	11.6	0	11.6	0		
REC	0	0	0	0	2.0	3.0	5.0	1.1	4.9	0	0.3	3.1	0	0.3	0	0	0	4.8		
FF	0	2.6	0	0	1.8	2.4	5.0	3.3	3.4	0	0	0	0	0	11.6	0	11.6	0		
Ref. No.	QR2313 (SCM-10)			QR2314 (SCM-10)			QR2401 (SCM-11)			QR2402 (SCM-11)			QR2501 (SCM-8)			QR2502 (SCM-8)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	11.7	11.7	0	0	11.6	0	0	5.1	0	5.1	4.1	4.0	0	11.6	0	0	0	4.9		
REC	11.7	0	11.7	0	4.6	3.1	0	0.1	4.8	5.1	4.1	4.0	0	11.6	0	0	0	4.9		
FF	11.7	11.7	0	0	11.6	0	0	5.2	0	5.2	5.1	4.0	0	0	4.9	0	0	4.9		
Ref. No.	QR2503 (SCM-8)			QR2504 (SCM-8)			QR2505 (SCM-8)			QR2701 (SCM-14)			QR2702 (SCM-15)			QR2703 (SCM-15)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	11.6	0	0	0	4.9	0	0	4.9	0	0	5.1	5.0	1.4	4.0	0	0.3	0		
REC	0	11.6	0	0	0	4.9	0	0	4.9	0	0.4	0	5.0	1.4	4.0	0	1.6	1.4		
FF	0	0	4.9	0	0	4.9	0	11.6	0	0	0	5.2	5.0	0	16.4	0	1.8	1.2		



Ref. No.	QR2704 (SCM-15)			QR60001 (SCM-6)			QR60002 (SCM-6)			QR60003 (SCM-6)			QR60004 (SCM-6)			QR60006 (SCM-6)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0.1	2.4	5.2	0.4	4.5	0	12.6	0	12.8	0.2	12.8	0	0.1	2.9	0	0	4.0		
REC	0	0.1	2.5	5.1	0.4	4.5	0	12.6	0	12.8	12.7	0	0	0	0	0	0	4.0		
FF	0	0.1	2.4	5.2	0.4	4.6	0	12.6	0	12.8	0.3	12.8	0	0.1	2.9	0	0	4.0		
Ref. No.	QR60007 (SCM-6)			QR60008 (SCM-6)			QR60010 (SCM-6)			QR60013 (SCM-6)			QR60012 (SCM-6)			QR60501 (SCM-7)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	5.3	0	0	13.0	0	0	3.7	0	0	4.8	0	0	1.6	0	0	10.3	0		
REC	0	5.3	0	0	0.1	4.8	0	0.1	4.9	0	4.8	0	0	1.6	0	0	10.2	0		
FF	0	5.3	0	0	13.0	0	0	3.7	0	0	4.9	0	0	1.6	0	0	10.2	0		
Ref. No.	QR60502 (SCM-7)			QR60503 (SCM-7)																
Mode	E	C	B	E	C	B														
STOP	4.9	4.8	0	0	0	13.9														
REC	4.9	4.8	0	0	0	13.9														
FF	5.2	0.3	4.9	0	0	13.9														



# VIDEO I/O C.B.A.

Ref. No.	IC3001 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.5	3.0	5.1	1.8	1.6	2.2	2.9	0	2.9	3.6	2.7	3.0	2.9	1.6						
REC	4.5	3.0	5.1	1.8	-1.6	2.2	2.9	0	2.9	3.6	2.7	3.0	2.9	1.6						
Ref. No.	IC3002 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.7	3.0	3.0	2.8	2.7	4.4	3.3	4.7	3.8	1.6	4.0	0	1.9	2.4	2.3	4.7	0	2.9	2.7	2.9
REC	4.7	3.0	3.0	2.8	2.7	4.4	3.3	4.7	3.8	1.6	4.0	0	1.9	2.4	2.3	4.7	0	2.9	2.7	2.9
Ref. No.	IC3003 (SCM-32)																			
Mode	21	22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
STOP	3.3	2.9	2.3	2.9	2.7	2.6	2.6	0	-4.9	0	0.1	0	0.1	4.5	4.5	4.5	2.9	4.7		
REC	3.3	2.9	2.4	2.9	2.7	2.6	2.6	0	-4.9	0	0.1	0.2	0.1	4.5	4.5	4.5	2.9	4.7		
Ref. No.	IC3004 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8												
STOP	7.1	0.1	7.1	0	0	11.4	6.3	0												
REC	7.1	0.1	7.1	0	0	11.4	6.3	0												
Ref. No.	IC3005 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	4.8	5.1	0.3	4.5	0.1	4.9	0	4.4	0.5	0.1	0.3	5.1	4.2	0	5.1				
REC	0	4.8	5.1	0.3	4.5	0.1	4.9	0	4.4	0.5	0.1	0.3	5.1	4.2	0	5.1				
Ref. No.	IC3006 (SCM-31)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.1	3.6	4.6	4.6	0	4.5	0	2.3	2.5	0	0.1	0.4	0	4.6						
REC	0.1	0.1	0.3	0.2	0	0	0	2.3	2.5	0	0.1	0.4	0	4.6						
Ref. No.	IC3007 (SCM-31)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.5	1.9	4.6	2.9	2.6	2.6	0	2.0	0	0	0	0	2.5	3.5	1.1	0.2	2.8	2.8	2.3	4.6
REC	3.5	1.9	4.6	2.9	2.6	2.6	0	2.0	0	0	0	1.0	2.5	3.5	1.1	0.2	2.8	2.8	2.3	4.7
Ref. No.	IC3007 (SCM-31)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	0	4.5	0.2	2.1	3.7	0.1	4.9	2.4	2.7	3.4	0	4.6								
REC	0	4.6	0.2	2.1	3.7	0.1	4.9	2.4	2.7	3.5	0	4.7								
Ref. No.	IC3008 (SCM-31)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	-0.9	-0.5	-0.4	4.9	-0.1	-0.1	0	1.5	1.5	1.5	-5.0	-2.4	-2.4	-2.4						
REC	-0.9	-0.5	-0.4	4.9	-0.1	-0.1	-0.1	1.5	1.5	1.5	-5.0	-2.4	-2.4	-2.4						
Ref. No.	IC3009 (SCM-31)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.5	1.6	1.5	1.6	1.4	0	0	0	0	2.5	0.2	0.2	0.2	0.2	0.2	4.9				
REC	1.5	1.6	1.5	1.6	1.4	0	0	0	0	2.5	0.2	0.2	0.2	0.2	0.2	4.9				
Ref. No.	IC3010 (SCM-32)								IC3011 (SCM-32)				IC3012 (SCM-32)							
Mode	1	2	3	4	5	6	7	8	I	G	O	1	2	3	4	5	6	7	8	
STOP	2.9	3.6	2.8	0	0	4.7	2.1	0	11.6	0	5.1	2.0	1.2	1.2	-4.8	1.6	1.6	1.6	4.7	
REC	2.9	3.6	2.8	0	0	4.7	2.1	0	11.6	0	5.1	2.0	1.2	1.2	-4.8	1.6	1.6	1.6	4.7	
Ref. No.	IC3013 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8												
STOP	3.6	0	0	-4.8	1.5	1.5	1.6	4.7												
REC	3.6	0	0	-4.8	1.5	1.5	1.6	4.7												
Ref. No.	IC3014 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	3.0	4.7	4.7	3.0	0	3.2	0	0	4.6	4.7	1.7	0.1	0	4.6	4.7				
REC	0	3.0	4.7	4.7	3.0	0	3.2	0	0	4.6	4.7	1.7	0.1	0	4.6	4.7				
Ref. No.	IC3015 (SCM-32)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.6	2.9	5.1	1.9	1.6	2.1	2.9	0	2.9	5.1	2.7	3.0	2.9	1.6						
REC	4.6	2.9	5.1	1.9	1.6	2.1	2.9	0	2.9	5.1	2.7	3.0	2.9	1.6						
Ref. No.	IC3017 (SCM-34)					IC3018 (SCM-32)					IC3020 (SCM-31)									
Mode	1	2	3	4	5	1	2	3	4	5	I	G	O							
STOP	0.1	4.9	0	0	4.8	5.1	4.5	0	4.5	5.1	11.5	0	5.0							
REC	0.1	4.9	0	0	4.8	5.1	4.5	0	4.5	5.1	11.5	0	5.0							



Ref. No.	IC3153 (SCM-31)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	1.5	1.4	1.5	0.1	4.0	0	1.2	0	0.1	4.6	4.6	0.2	4.0	0	1.0	4.6				
REC	1.5	1.4	1.3	0.1	4.1	0	1.2	0	0.1	4.6	4.6	0.2	4.0	0	0.8	4.6				
Ref. No.	IC3201 (SCM-33)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.5	0.3	2.4	1.9	0	2.6	1.9	2.4	4.6	2.0	0.3	4.1	0.5	3.2	0.4	0				
REC	2.5	0.3	2.4	1.9	0	3.4	1.9	2.4	4.6	2.0	0	4.1	0.4	3.2	0.3	0				
Ref. No.	IC3202 (SCM-33)							IC3203 (SCM-33)												
Mode	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8					
STOP	3.2	0	2.9	0	3.1	0.7	4.6	2.9	2.2	2.3	0	3.5	0	3.5	4.6					
REC	3.2	0	2.9	0	3.1	0.7	4.6	3.4	1.7	2.3	0	3.5	0	3.5	4.7					
Ref. No.	IC3204 (SCM-33)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.0	1.9	1.0	1.0	2.3	1.7	0.9	1.9	2.0	4.7	4.7	2.0	2.0	0	2.5	4.7	2.6	2.4	2.4	2.4
REC	1.0	2.0	1.0	1.0	2.3	1.7	0.9	1.9	2.0	4.7	4.7	2.0	2.0	0	2.3	4.7	2.6	2.3	2.4	2.4
Ref. No.	IC3204 (SCM-33)												IC3205 (SCM-33)							
Mode	21	22	23	24	25	26	27	28	29	30	31	32	1	2	3	4	5	6	7	8
STOP	3.1	3.0	2.2	2.2	4.7	2.1	0	3.1	2.4	2.4	2.3	4.7	-1.0	-1.7	-4.8	2.4	2.4	4.7	-1.7	-1.0
REC	3.1	3.0	2.2	4.7	1.7	2.1	0	3.1	2.3	2.3	2.3	4.7	-1.0	-1.7	-4.9	2.4	2.4	4.8	-1.7	-1.0
Ref. No.	IC3206 (SCM-33)																			
Mode	1	2	3	4	5	6	7	8	9											
STOP	2.6	3.3	7.4	4.2	0	0	0.2	0	8.2											
REC	2.6	3.3	7.3	4.2	0	0	0.2	0	8.2											
Ref. No.	IC3207 (SCM-33)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	3.6	4.9	0.1	4.2	0.1	4.9	0.9	0	0.1	4.9	0.3	4.2	0.1	4.9	0.8	4.9				
REC	3.6	4.9	0.1	4.2	0.1	4.9	0.9	0	0.1	4.9	0.1	4.2	0.1	4.9	0.8	4.9				
Ref. No.	IC3208 (SCM-33)					IC3209 (SCM-33)								IC3301 (SCM-34)						
Mode	1	2	3	4	5	1	2	3	4	5	6	7	8	1	2	3	4	5		
STOP	0	0.4	0	4.5	4.8	2.8	0	2.8	0	0	4.6	2.0	0	0	4.5	0	0.4	4.9		
REC	0	0.4	0	4.5	4.9	2.8	0	2.8	0	0	4.6	2.0	0	0	4.5	0	0.4	4.9		
Ref. No.	IC3302 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	-0.1	0.9	0.9	0	4.9	0.4	0	2.5	3.2	2.8	3.2	0.2	0.1	4.9						
REC	-0.1	0.9	0.8	0.8	4.9	0.4	0	2.5	3.2	2.8	3.2	0.2	0.1	4.9						
Ref. No.	IC3303 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.8	2.8	2.8	4.9	2.5	2.5	2.5	1.5	2.3	2.3	0	0.9	0.9	0.9						
REC	2.8	2.8	2.8	4.9	2.5	2.5	2.5	1.4	2.3	2.3	0	0.8	0.8	0.8						
Ref. No.	IC3304 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8												
STOP	7.1	0.1	7.1	0	0	11.5	6.4	0												
REC	7.1	0.1	7.1	0	0	11.5	6.4	0												
Ref. No.	IC3305 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	3.3	4.0	3.3	0.2	2.8	0	2.9	2.4	4.8	4.6	0.7	0.1	1.2	3.7	3.5				
REC	0	3.3	4.0	3.2	0.2	2.8	0	2.9	2.4	4.8	4.6	0.7	0.1	1.3	3.7	3.5				
Ref. No.	IC3306 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8												
STOP	2.9	4.5	2.8	3.6	2.9	4.8	2.1	0												
REC	2.9	4.5	2.8	0.8	2.9	4.8	2.1	0												
Ref. No.	IC3307 (SCM-34)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	2.4	4.8	0	0.9	3.4	1.6	0	4.7	0.4	3.5	0	4.8	4.6	0	4.8				
REC	0	2.4	4.8	0	0.9	3.4	1.6	0	4.7	0.4	3.5	0	4.8	4.6	0	4.8				
Ref. No.	IC3308 (SCM-34)								IC3309 (SCM-34)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	4.8	4.5	2.4	2.4	0	2.4	0	2.4	0	0	0	-4.8	0	0	0	4.7				
REC	4.8	4.5	2.4	2.4	0	2.4	0	2.4	0	0	0	-4.8	0	0	0	4.7				



Ref. No.	IC3310 (SCM-34)								IC3311 (SCM-36) SUB					IC3312 (SCM-36) SUB						
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	1	2	3	4	5		
STOP	4.8	3.6	2.4	2.5	0	2.5	0	2.5	2.5	2.5	0	0	4.8	0	0.9	0	0	4.8		
REC	4.8	0	2.4	2.5	0	2.5	0	2.5	2.5	2.5	0	0	4.8	0	0.9	0	0.1	4.8		
Ref. No.	Q3001 (SCM-32) -								Q3004 (SCM-32)						Q3005 (SCM-32)			Q3006 (SCM-32)		
Mode	1	2	3	4	5	6	1	2	3	4	5	6	E	C	B	E	C	B		
STOP	5.1	2.4	3.1	0	3.0	2.4	3.1	0.1	3.1	4.1	0.1	4.1	1.9	9.7	2.6	1.9	5.3	0		
REC	5.1	2.4	3.1	0	3.0	2.4	3.1	0.1	3.1	4.1	0.1	4.1	1.9	9.6	2.6	1.9	5.4	0		
Ref. No.	Q3007 (SCM-32)			Q3008 (SCM-32)			Q3009 (SCM-32)						Q3010 (SCM-32)							
Mode	E	C	B	E	C	B	1	2	3	4	5	6	1	2	3	4	5	6		
STOP	10.3	5.4	9.7	6.0	0	5.4	4.7	3.4	3.0	4.7	2.9	2.3	11.4	4.1	3.5	11.4	3.5	2.9		
REC	10.3	5.4	9.6	6.0	0	5.4	4.7	3.4	3.0	4.7	2.9	2.3	11.4	4.1	3.5	11.4	3.5	2.9		
Ref. No.	Q3011 (SCM-32)			Q3012 (SCM-32)			Q3013 (SCM-32)						Q3017 (SCM-31)							
Mode	E	C	B	E	C	B	1	2	3	4	5	6	E	C	B					
STOP	3.5	-4.9	2.9	2.6	11.4	3.2	-4.9	2.6	3.2	-4.9	3.2	3.8	5.0	5.0	5.7					
REC	3.5	-4.9	2.9	2.6	11.4	3.2	-4.9	2.6	3.2	-4.9	3.2	3.8	0.3	5.0	0					
Ref. No.	Q3018 (SCM-32)			Q3019 (SCM-32)			Q3020 (SCM-31)			Q3021 (SCM-32)			Q3022 (SCM-32)			Q3024 (SCM-32)				
Mode	D	G	S	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	1.2	0	1.6	2.3	6.8	2.9	11.5	0	11.5	2.3	4.9	2.8	2.8	0	2.3	0	4.9	0		
REC	1.2	0	1.6	2.3	6.8	2.9	11.5	11.4	10.8	2.3	4.9	2.8	2.8	0	2.3	0	4.9	0		
Ref. No.	Q3025 (SCM-31)			Q3026 (SCM-31)			Q3027 (SCM-31)			Q3028 (SCM-32)			Q3029 (SCM-32)			Q3030 (SCM-31)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	5.0	0	0.9	2.7	1.6	1.6	3.0	2.3	4.7	0	4.7	2.1	4.7	1.9	1.7	2.9	2.4		
REC	0	4.6	0	0.9	2.7	1.6	0	3.0	2.3	4.7	0	4.7	2.1	4.7	1.9	1.7	2.9	2.4		
Ref. No.	Q3031 (SCM-31)			Q3032 (SCM-31)			Q3033 (SCM-31)			Q3034 (SCM-32)			Q3040 (SCM-32)			Q3201 (SCM-33)				
Mode	D	G	S	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	-0.7	0	2.3	0	1.7	1.6	4.6	2.3	2.0	5.1	2.7	0.9	4.7	1.5	-3.7	0.9	-2.9		
REC	0	-0.7	0	2.3	0	1.7	0	4.6	0	2.0	5.1	2.7	1.0	4.7	1.6	-3.7	0.9	-2.9		
Ref. No.	Q3202 (SCM-33)			Q3203 (SCM-33)			Q3204 (SCM-33)			Q3205 (SCM-33)			Q3206 (SCM-33)			Q3207 (SCM-33)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.3	4.6	0.9	-1.6	1.5	-0.8	1.9	4.6	1.0	1.8	4.6	2.4	1.9	4.7	0.6	1.8	4.7	0.6		
REC	0.3	4.6	0.9	-1.6	1.5	-0.8	0.2	0	0.7	0.1	4.6	0.2	1.9	4.7	0.6	1.9	4.7	0.6		
Ref. No.	Q3208 (SCM-33)			Q3209 (SCM-33)			Q3210 (SCM-33)			Q3211 (SCM-33)			Q3212 (SCM-33)			Q3213 (SCM-33)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	1.8	7.7	2.5	7.4	11.5	7.7	0	2.2	0	-2.6	-0.1	-1.8	1.9	4.7	2.5	2.6	4.7	3.2		
REC	1.8	7.7	2.5	7.1	11.5	7.7	0	2.2	0	-2.6	0	-1.8	1.9	4.7	2.5	2.6	4.7	3.2		
Ref. No.	Q3214 (SCM-33)			Q3215 (SCM-33)			Q3216 (SCM-33)			Q3217 (SCM-33)			Q3218 (SCM-33)			Q3219 (SCM-33)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.8	4.7	-0.2	1.6	1.5	-0.8	0	0	0.6	-0.6	4.7	0	-0.7	1.4	0	0.7	4.7	1.3		
REC	-0.8	4.7	-0.2	-1.5	1.5	-0.8	0	0	0.6	-0.6	4.7	0	-0.7	1.4	0	0.7	4.7	1.3		
Ref. No.	Q3220 (SCM-33)			Q3221 (SCM-33)			Q3222 (SCM-33)			Q3223 (SCM-33)			Q3224 (SCM-33)			Q3225 (SCM-33)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.7	1.2	0	1.3	4.7	1.9	3.1	4.8	3.5	2.4	4.8	2.8	1.6	4.8	2.2	-0.8	0.7	-0.1		
REC	-0.7	1.2	0	1.3	4.7	1.9	3.1	4.8	3.5	2.4	4.8	2.8	1.6	4.8	2.2	-0.8	0.6	0		
Ref. No.	Q3226 (SCM-33)			Q3227 (SCM-33)			Q3228 (SCM-33)					Q3229 (SCM-33)			Q3230 (SCM-33)			Q3231 (SCM-33)		
Mode	E	C	B	E	C	B	1	2	3	4	5	E	C	B	E	C	B	E	C	B
STOP	-0.6	4.7	0	0	-0.1	0	0.1	0.3	0	0	0	-0.8	4.7	-0.2	-1.5	1.4	-0.8	0	-4.8	-1.6
REC	-0.6	4.7	0	0	-0.1	0	0	0.3	0	0	0	-0.8	4.7	-0.2	-1.5	1.4	-0.8	-0.9	-4.8	-1.5
Ref. No.	Q3232 (SCM-33)			Q3233 (SCM-33)			Q3234 (SCM-33)			Q3235 (SCM-33)					Q3236 (SCM-33)					
Mode	E	C	B	E	C	B	E	C	B	1	2	3	4	5	1	2	3	4	5	
STOP	-0.9	-4.8	-1.5	-0.9	-4.8	-1.6	8.2	11.5	8.8	0.4	0.4	1.8	0	2.0	-0.1	0.1	0.4	0	0.4	
REC	-0.8	-4.8	-1.5	-0.9	-4.8	-1.5	8.2	11.5	8.8	0.4	0.4	1.8	0	2.0	0	0	0.4	0	0.4	
Ref. No.	Q3301 (SCM-34)			Q3302 (SCM-34)			Q3306 (SCM-34)			Q3307 (SCM-34)			Q3308 (SCM-34)			Q3309 (SCM-34)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	4.9	0.2	4.8	3.2	4.9	3.8	3.7	3.7	3.0	-0.6	4.7	0	2.9	4.7	2.8	2.2	4.7	2.9		
REC	4.9	0.2	4.8	3.2	4.9	3.8	0.8	0.1	0.2	-0.6	4.7	0	2.9	4.7	2.9	2.2	4.7	2.9		
Ref. No.	Q3310 (SCM-34)			Q3311 (SCM-34)			Q3312 (SCM-34)			Q3313 (SCM-34)			Q3314 (SCM-34)			Q3315 (SCM-34)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	3.1	4.8	3.8	0.9	4.8	1.5	-2.7	2.6	-2.1	1.9	4.8	2.6	1.9	4.8	2.5	1.4	3.4	2.1		
REC	3.1	4.8	3.8	0.9	4.8	1.5	-2.7	2.6	-2.1	1.9	4.8	2.6	1.9	4.8	2.4	1.3	3.5	2.1		



Ref. No.	Q3316 (SCM-34)			Q3317 (SCM-34)			Q3318 (SCM-34)			Q3319 (SCM-34)			Q3320 (SCM-34)			Q3321 (SCM-34)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.5	4.8	0	-1.2	4.8	-0.6	-0.5	4.8	0	2.0	0	1.4	-0.8	1.4	0	1.1	4.7	1.7		
REC	-0.5	4.8	0	-1.2	4.8	-0.6	-0.5	4.8	0	2.0	0	1.4	-0.8	1.4	0	1.1	4.7	1.7		
Ref. No.	QR3002 (SCM-31)			QR3003 (SCM-31)			QR3005 (SCM-31)			QR3006 (SCM-31)			QR3007 (SCM-32)			QR3008 (SCM-32)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	3.8	4.9	0	4.5	0	0	7.9	11.5	0	11.5	0	1.8	0	0	0	4.7		
REC	0	0	3.8	4.9	0	4.5	0	11.4	0.6	11.5	11.5	0	0	1.8	0	0	0	4.7		
Ref. No.	QR3009 (SCM-31)			QR3010 (SCM-31)			QR3011 (SCM-31)			QR3012 (SCM-31)			QR3013 (SCM-31)			QR3014 (SCM-31)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	5.7	0	0	4.9	0	4.9	4.9	5.3	4.9	3.5	5.4	4.9	3.5	4.8	0	0	0		
REC	0	0	7.9	0	4.9	0	4.9	4.9	5.4	4.9	3.5	5.4	4.9	3.5	4.8	0	0	0		
Ref. No.	QR3015 (SCM-31)			QR3016 (SCM-32)			QR3017 (SCM-32)			QR3018 (SCM-32)			QR3201 (SCM-33)			QR3204 (SCM-33)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	2.3	0.1	0	0.1	1.8	4.7	4.7	0.1	1.5	4.7	2.1	4.6	0	4.6	0	0	5.4		
REC	0	2.3	0.1	0	0.1	1.8	4.7	4.7	0.1	1.5	4.7	2.1	4.6	0	4.6	0	0	5.4		
Ref. No.	QR3205 (SCM-33)			QR3206 (SCM-33)			QR3209 (SCM-33)			QR3211 (SCM-33)			QR3212 (SCM-33)			QR3301 (SCM-34)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	5.3	0	2.0	2.5	4.6	0	5.4	0	0	0	0	2.0	1.8	0	4.9	0.1		
REC	0	0	5.3	0	2.0	2.5	4.6	0	5.4	0	0	0	0	2.0	1.8	0	4.9	0.1		
Ref. No.	QR3213 (SCM-33)																			
Mode	E	C	B																	
STOP	3.3	0.4	3.3																	
REC	3.4	0.4	3.4																	



## TBC (1) C.B.A.

Ref. No.	IC8001 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	1.5	1.5	2.6	1.1	2.8	2.1	1.6	1.4	4.9	1.1	4.9	4.9	4.9	2.6	2.6	4.9	1.3	0
REC	0	0	1.5	1.6	2.4	1.1	2.6	2.1	1.6	1.4	4.9	1.1	4.9	4.9	4.9	2.6	2.6	4.9	1.3	0
Ref. No.	IC8001 (SCM-56)																			
Mode	21	22	23	24																
STOP	0	0.6	0.6	0																
REC	0	0.6	0.6	0																
Ref. No.	IC8002 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	1.4	1.6	2.1	2.8	1.1	2.6	1.5	1.5	0	1.1	2.3	2.3	3.1	1.4	2.9	2.2	1.7	1.4	5.1
REC	0	1.4	1.6	2.1	2.6	1.1	2.4	1.6	1.5	0	1.1	2.3	2.3	2.9	1.3	2.8	2.2	1.7	1.4	5.1
Ref. No.	IC8003 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0	0	0	0	4.6	5.1	2.3	0	2.3	3.1	1.3	3.4	2.2	1.7	1.5	1.3
REC	0	0	0	0	0	0	0	0	4.6	5.1	2.2	0	2.3	2.8	1.3	3.4	2.2	1.7	1.5	1.3
Ref. No.	IC8003 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.4	1.9	3.0	1.1	2.6	2.0	2.0	0	0	0	0	0	5.1	0	0	0	0	1.5	1.7	2.2
REC	1.4	1.9	3.0	1.1	2.4	1.9	1.9	0	0	0	0	0	5.1	0	0	0	0	1.5	1.7	2.2
Ref. No.	IC8003 (SCM-56)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	3.4	1.3	3.0	2.3	2.3	1.5	1.7	2.2	3.4	1.3	3.1	0	2.3	5.1	2.3	0	0	0	0	0
REC	3.4	1.3	2.8	2.3	2.2	1.5	1.7	2.2	3.4	1.3	2.8	0	2.3	5.1	2.2	0	0	0	0	0
Ref. No.	IC8003 (SCM-56)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	0	0	0	0	5.1	1.2	5.1	1.2	0	0	5.1	5.1	0	4.6	0	0	0	0
REC	0	0	0	0	0	0	5.1	1.2	5.1	1.2	0	0	5.1	5.1	0	4.6	0	0	0	0
Ref. No.	IC8003 (SCM-56)																			
Mode	81	82	83	84																
STOP	0	0	0	0																
REC	0	0	0	0																
Ref. No.	IC8004 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0.3	0	2.0	2.0	2.0	3.0	1.2	0	0	0	0	0	0	0	0	2.0	0	5.1	0
REC	0.4	0.3	0	2.0	1.9	1.8	2.6	1.1	0	0	0	0	0	0	0	0	2.0	0	5.1	0
Ref. No.	IC8004 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	1.3	3.1	2.2	2.3	0	0	0	5.1	1.1	2.9	1.9	2.0	2.4	0.3	0		
REC	0	0	0	1.2	2.9	2.1	2.2	0	0	0	5.1	1.0	2.6	1.8	1.9	2.4	0.3	0		
Ref. No.	IC8005 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0.3	0	2.0	3.1	2.0	1.5	1.2	0	0	0	0	0	0	0	0	2.0	0	5.1	0
REC	0.4	0.3	0	2.0	3.1	1.9	1.5	1.2	0	0	0	0	0	0	0	0	2.0	0	5.1	0
Ref. No.	IC8005 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	1.5	1.7	2.3	3.4	0	0	0	5.1	1.3	1.5	2.0	3.1	2.4	0.3	0		
REC	0	0	0	1.5	1.7	2.3	3.4	0	0	0	5.1	1.3	1.5	2.0	3.1	2.4	0.3	0		
Ref. No.	IC8006 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0.3	0	2.0	2.0	1.9	2.9	1.1	5.1	0	0	0	0	0	0	0	2.0	0	5.1	0
REC	0.4	0.3	0	2.0	2.0	1.8	2.6	1.1	5.1	0	0	0	0	0	0	0	2.0	0	5.1	0
Ref. No.	IC8006 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	1.3	3.1	2.2	2.3	0	0	0	0	1.1	2.9	1.9	2.0	2.4	0.3	0		
REC	0	0	0	1.2	2.9	2.1	2.2	0	0	0	0	1.0	2.6	1.8	1.9	2.4	0.3	0		
Ref. No.	IC8007 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0.3	0	2.0	3.1	2.0	1.5	1.2	5.1	0	0	0	0	0	0	0	2.0	0	5.1	0
REC	0.4	0.3	0	1.9	3.1	1.9	1.5	1.2	5.1	0	0	0	0	0	0	0	1.8	0	5.1	0



Ref. No.	IC8007 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	1.5	1.7	2.3	3.4	0	0	0	0	1.3	1.5	2.0	3.1	2.4	0.3	0		
REC	0	0	0	1.5	1.7	2.2	3.4	0	0	0	0	1.3	1.5	2.0	3.1	2.4	0.3	0		
Ref. No.	IC8008 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	2.0	2.3	2.8	1.4	3.2	2.0	1.5	1.3	0	2.4	1.5	1.7	2.2	3.5	1.6	3.0	2.5	2.3	5.1
REC	0	1.9	2.1	2.9	1.3	3.1	2.0	1.5	1.3	0	2.4	1.5	1.7	2.2	3.4	1.4	3.0	2.3	2.2	5.1
Ref. No.	IC8009 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0.9	5.1	1.5	1.7	2.2	3.4	1.3	3.0	2.3	2.3	0.1	4.0	0	4.0	4.0	1.9	1.9	2.5	1.1
REC	0	0.9	5.1	1.5	1.7	2.2	3.6	1.7	2.9	2.6	2.4	0.1	4.0	0	4.0	4.0	2.0	2.2	2.4	1.4
Ref. No.	IC8009 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28												
STOP	2.9	2.0	1.4	1.3	0	3.9	0	5.1												
REC	3.0	1.9	1.4	1.3	0	3.9	0	5.1												
Ref. No.	IC8010 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ref. No.	IC8010 (SCM-56)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	1.9	2.1	2.2	1.3	3.1	1.9	1.5	1.3	0	2.4	2.6	2.8	1.6	3.6	2.2	1.7	1.5	0	0	0
REC	2.0	2.2	2.4	1.4	3.0	1.9	1.4	1.3	0	2.4	2.6	2.9	1.7	3.6	2.2	1.7	1.5	0	0	0
Ref. No.	IC8010 (SCM-56)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	5.1	0	5.1	5.1	0	0	0	1.5	1.7	2.2	3.9	1.3	2.7	2.6	2.3	1.5	1.7	2.2	3.8	1.6
REC	5.1	0	5.1	5.1	0	0	0	1.5	1.7	2.2	3.4	1.2	3.1	2.2	2.2	1.5	1.7	2.2	3.4	1.3
Ref. No.	IC8010 (SCM-56)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	2.6	2.5	2.4	0	0	0	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0
REC	3.0	2.2	2.3	0	0	0	5.1	5.1	0	0	0	0	0	0	0	0	0	0	0	0
Ref. No.	IC8010 (SCM-56)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0	0	0	0	0	0	0	0	0	0	5.1	0	0	5.1	0	1.2	5.1	5.1	5.1	5.4
REC	0	0	0	0	0	0	0	0	0	0	5.1	0	0	5.1	0	1.2	5.1	5.1	5.1	5.4
Ref. No.	IC8011 (SCM-62)(SCM-56)														IC8012 (SCM-56)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	G	V	O			
STOP	1.9	0	2.4	2.0	0	1.9	0	4.5	5.1	0	4.6	0	5.1	5.1	0	5.1	5.1			
REC	1.9	0	2.4	2.1	0	1.9	0	4.6	5.1	0	4.6	0	5.1	5.1	0	5.1	5.1			
Ref. No.	IC8013 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	4.6	0.9	5.1	5.1	0	0	2.6	2.6	5.1	0	2.6	5.1	5.1						
REC	5.1	4.6	0.9	5.1	5.1	0	0	2.6	2.6	5.1	0	2.6	5.1	5.1						
Ref. No.	IC8014 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	5.1	0.1	1.9	0	2.4	0	2.0	5.1	2.4	5.3	0	5.1	5.1						
REC	5.1	5.1	0.1	1.9	0	2.4	0	2.1	5.1	2.4	2.3	0	5.1	5.1						
Ref. No.	IC8015 (SCM-56)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	2.3	2.4	2.7	1.6	3.6	2.2	1.7	1.5	0	2.4	1.5	1.7	2.2	3.6	1.6	2.9	2.4	2.3	5.1
REC	0	2.3	2.4	2.8	1.6	3.5	2.2	1.7	1.5	0	2.4	1.5	1.7	2.2	3.4	1.6	3.0	2.3	2.2	5.1
Ref. No.	IC8016 (SCM-56)				IC8051 (SCM-57)				IC8052 (SCM-57)				IC8053 (SCM-57)							
Mode	I	G	O	I	G	O	I	G	O	I	G	O	1	2	3	4	5	6	7	8
STOP	11.6	0	4.9	11.6	0	9.1	11.6	0	5.1	0	0	0	-4.9	0	0	0	0	9.1		
REC	11.6	0	4.9	11.6	0	9.1	11.6	0	5.1	0	0	0	-4.9	0	0	0	0	9.1		
Ref. No.	IC8054 (SCM-57)								IC8055 (SCM-57)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	4.1	2.1	2.1	-4.9	0	0	0	9.1	3.6	0	0	-4.9	0	0	0	9.1				
REC	4.1	2.1	2.1	-4.9	0	0	0	9.1	3.6	0	0	-4.9	0	0	0	9.1				



Ref. No.	IC8056 (SCM-57)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.2	1.5	1.7	2.2	4.0	1.5	2.5	2.4	2.4	0	1.2	1.9	2.0	3.2	1.3	4.1	2.1	1.6	1.4	5.1
REC	1.2	1.5	1.7	2.2	3.4	1.3	2.8	2.3	2.3	0	1.2	1.9	2.0	3.7	1.2	3.5	2.1	1.6	1.4	5.1
Ref. No.	IC8057 (SCM-57)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	4.8	2.5	4.1	5.1	4.3	0	5.1	4.8	0	2.4	1.4	1.7	2.2	3.5	1.4	3.9	2.1	2.0	0
REC	0	4.8	2.5	4.1	5.1	4.3	0	5.1	4.8	0	2.4	1.4	1.7	2.2	3.5	1.3	3.8	1.9	2.0	0
Ref. No.	IC8101 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0	1.7	1.5	2.3	0	1.7	1.6	2.4	2.5	2.4	0	2.5	2.4	2.3	1.4	1.0	0	5.0	5.1
REC	0	0	1.7	1.5	2.3	0	1.6	1.5	2.3	2.5	2.3	0	2.5	2.4	2.2	1.5	1.0	0	5.0	5.1
Ref. No.	IC8101 (SCM-58)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.9	5.0	0.2	5.0	0	0	0	0	0	2.5	0	0	0	0	5.0	0	1.0	0	5.0	2.3
REC	4.9	5.0	0.2	5.0	0	0	0	0	0	2.5	0	0	0	0	5.0	0	1.0	0	5.0	2.3
Ref. No.	IC8101 (SCM-58)																			
Mode	41	42	43	44	45	46	47	48												
STOP	0	0	5.0	0	5.0	2.5	0.4	0.4												
REC	0	0	5.0	0	5.0	2.5	0.4	0.4												
Ref. No.	IC8102 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	5.1	5.1	4.5	0.1	0	1.3	0	0	5.0	5.1	4.4	0.1	0	1.6	5.1				
REC	0	5.1	5.1	4.5	0.1	0	1.3	0	0	5.0	5.1	4.4	0.1	0	1.6	5.1				
Ref. No.	IC8104 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0	0.4	1.6	0.3	5.1	3.5	2.1	0	5.1	5.1	0	0	4.3	0	0	0
REC	0	0	0	0	0	0.4	1.6	0.3	5.1	3.5	2.1	0	5.1	5.1	0	0	4.2	0	0	0
Ref. No.	IC8104 (SCM-58)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	2.2	5.1	4.2	1.7	5.1	1.6	5.1	1.6	0.2	5.1	5.1	5.1	0	5.1	0	0	0	0
REC	0	0	2.2	5.1	4.1	1.7	5.1	1.5	5.1	1.6	0.2	5.1	5.1	5.1	0	5.1	0	0	0	0
Ref. No.	IC8104 (SCM-58)																			
Mode	41	42	43	44	45	46	47	48												
STOP	0	5.1	0	0	0	0	0	4.0												
REC	0	5.1	0	0	0.1	0.1	1.6	4.0												
Ref. No.	IC8109 (SCM-61)(SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	2.3	0	2.5	2.4	2.5	2.3	0	2.5	2.0	0	0	5.1	5.1	5.1						
REC	2.3	0	2.5	2.4	2.5	2.3	0	2.5	2.0	0	0	5.1	5.1	5.1						
Ref. No.	IC8110 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	0.4	4.6	5.1	5.1	0	0	2.4	5.1	2.5	2.4	2.4	5.1	5.1						
REC	5.1	0.4	4.6	5.1	5.1	0	0	2.4	5.1	2.5	2.4	2.4	5.1	5.1						
Ref. No.	IC8112 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0.4	5.1	4.2	0.2	4.9	1.1	0	0	4.2	5.1	4.2	0.2	4.9	1.0	5.1				
REC	0	0.4	5.1	4.2	0.2	4.9	1.1	0	0	4.2	5.1	4.2	0.2	4.9	1.0	5.1				
Ref. No.	IC8113 (SCM-58)(SCM-60)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0.4	5.1	1.3	4.4	0	1.2	0	1.4	5.1	5.1	0.2	3.2	0	1.5	5.1				
REC	0	0.4	5.1	1.4	4.4	0	1.2	0	1.4	5.1	5.1	0.2	3.2	0	1.5	5.1				
Ref. No.	IC8114 (SCM-58)										IC8115 (SCM-58)									
Mode	1	2	3	4	5	1	2	3	4	5										
STOP	0	4.6	0	0.4	5.1	0	0.4	0	5.0	5.1										
REC	0	4.6	0	0.4	5.1	0	0.4	0	5.0	5.1										
Ref. No.	IC8116 (SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.4	5.4	5.4	0	2.5	0	0	0	0	5.1	5.1	0	0	0.4	2.6	4.9	0	0	0	0
REC	5.4	5.4	5.4	0	2.5	0	0	0	0	5.1	5.1	0	0	0.4	2.6	4.9	0	0	0	0



Ref. No.	IC8116 (SCM-58)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.1	0	0	0	0	2.6	0	5.1	0	0	5.1	5.1	1.6	4.5	2.5	5.1	2.3	4.4	2.7	0
REC	5.1	0	0	0	0	2.6	0	5.1	0	0	5.1	5.0	1.6	4.5	2.5	5.1	2.2	4.4	2.7	0
Ref. No.	IC8116 (SCM-58)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	5.1	0	0	0	4.6	5.0	5.1	4.6	0	0	0	0	0	0	1.8	0	0	0.1	2.4
REC	0	5.1	0	0	0	4.6	5.0	5.1	4.4	0	0	0	0	0	0	1.8	0	0	0.1	2.4
Ref. No.	IC8116 (SCM-58)										IC8118 (SCM-58)									
Mode	61	62	63	64	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STOP	2.4	5.1	0	0	1.2	0.8	0.8	4.4	0.2	0	1.2	0	0	4.2	5.1	4.3	0.1	5.1	0.3	5.1
REC	2.4	5.1	0.1	0	1.2	0.8	0.8	4.4	0.2	4.9	1.2	0	0	4.2	5.1	4.2	0.1	5.1	0.1	5.1
Ref. No.	IC8119 (SCM-64) TBC SUB																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.1	4.5	0	2.7	2.7	0	0	0	0	4.5	0	5.0	5.0	5.0	5.1	5.1				
REC	5.1	4.6	0	2.7	2.7	0	0	0	0	4.5	0	5.0	5.0	5.0	5.1	5.1				
Ref. No.	IC8120 (SCM-64) TBC SUB														IC8201 (SCM-59)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	I	G	O			
STOP	0.1	0	0.1	0	0.1	0.1	0	0	0	0	0	0	0	5.1	11.6	0	9.2			
REC	0.1	0	0.1	0	0.1	0.1	0	0	0	0	0	0	0	5.1	11.6	0	9.2			
Ref. No.	IC8202 (SCM-59)								IC8203 (SCM-59)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	1.5	0.8	0.8	-4.8	0.7	0.7	0.7	4.7	0	0	0	-4.8	1.0	1.0	1.3	4.7				
REC	1.5	0.8	0.8	-4.8	0.7	0.7	0.7	4.7	0	0	0	-4.8	1.0	1.0	1.3	4.7				
Ref. No.	IC8204 (SCM-59)								IC8205 (SCM-59)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	4.0	3.5	3.5	-4.9	3.5	3.5	3.5	9.2	3.5	3.4	3.4	0	3.4	3.4	3.5	9.2				
REC	4.0	3.5	3.5	-4.9	3.5	3.5	3.5	9.2	3.5	3.4	3.4	0	3.4	3.4	3.5	9.2				
Ref. No.	IC8206 (SCM-59)								IC8207 (SCM-59)					IC8208 (SCM-59)						
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	1	2	3	4	5		
STOP	4.0	3.5	3.5	-4.9	0	0	0	9.2	3.5	3.5	0	0.1	4.7	1.3	0.8	0	0.1	4.7		
REC	4.0	3.5	3.5	-4.9	0	0	0	9.2	3.5	3.5	0	0.1	4.7	1.3	0.8	0	0.1	4.7		
Ref. No.	IC8210 (SCM-59)					IC8211 (SCM-58)(SCM-59)(SCM-62)														
Mode	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
STOP	3.5	3.5	0	0.1	4.7	0.4	0.4	0.2	5.0	0.4	0.4	0	0.1	0.1	5.1	0.1	5.1	0.1	5.1	
REC	3.5	3.5	0	0.1	4.7	0.4	0.4	0.2	5.0	0.4	0.4	0	0.1	0.1	5.1	0.1	5.1	0.1	5.1	
Ref. No.	IC8212 (SCM-64) TBC SUB																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	2.7	0	5.1	0	5.1	0	5.1	0	5.1	0.1	5.1	0	5.1						
REC	5.1	2.7	0	5.1	0	5.1	0	5.1	0	5.1	0.1	5.1	0	5.1						
Ref. No.	IC8301 (SCM-61)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.5	5.1	5.1	0	0	0	0	0	0	5.1	0	5.1	2.2	2.2	2.0	2.0	0	0.3	0	0
REC	2.5	5.1	5.1	0	0	0	0	0	0	5.1	0	5.1	2.3	2.2	2.0	1.9	4.6	0.3	0	0
Ref. No.	IC8301 (SCM-61)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	0	0	0	0	0	0	0	0	5.1	5.4	5.1	0	0	0	0	1.6
REC	0	0	0	0	0	0	0	0	0	0	0	0	5.1	5.4	5.1	0	0	0	0	1.6
Ref. No.	IC8301 (SCM-61)																			
Mode	41	42	43	44																
STOP	1.8	1.9	2.1	0																
REC	1.8	1.9	2.1	0																
Ref. No.	IC8302 (SCM-61)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.7	1.7	1.8	2.1	0	1.0	1.6	0.9	5.1	3.5	2.1	0	5.1	5.1	3.5	3.5	4.3	0	0	0
REC	1.6	1.8	1.9	2.1	0	1.0	1.6	0.9	5.1	3.5	2.1	0	5.1	5.1	3.5	3.5	4.3	0	0	0
Ref. No.	IC8302 (SCM-61)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	2.5	5.1	4.4	1.6	5.1	1.5	5.1	1.6	0.2	5.1	5.1	5.1	0	5.1	0	1.8	1.8	2.0
REC	0	0	2.5	5.1	4.4	1.6	5.1	1.5	5.1	1.5	0.3	5.1	5.1	5.1	0	5.1	0	1.8	1.8	2.1



Ref. No.	IC8302 (SCM-61)																			
Mode	41	42	43	44	45	46	47	48												
STOP	2.1	5.1	0	0	0.1	0.1	1.5	3.9												
REC	2.1	5.1	0	0	0.1	0.5	1.6	3.9												
Ref. No.	IC8303 (SCM-61)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0	0	0	4.3	4.3	0	4.3	0	0	0	0	0	0	0	0	2.5	0	5.1	0
REC	0.4	0	0	0	0	4.3	0	4.3	0	0	0	0	0	0	0	0	2.5	0	5.1	0
Ref. No.	IC8303 (SCM-61)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	1.9	2.0	2.2	2.3	0	0	0	5.1	1.8	1.8	2.0	2.1	1.9	0.3	0		
REC	0	0	0	1.9	2.0	2.3	2.4	0	0	0	5.1	1.8	1.8	2.0	2.1	1.9	0.3	0		
Ref. No.	IC8304 (SCM-61)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	0	0	0	4.3	4.3	0	4.3	0	0	0	0	0	0	0	0	2.5	0	5.1	0
REC	0.4	0	0	0	0	0	0	4.3	0	0	0	0	0	0	0	0	2.5	0	5.1	0
Ref. No.	IC8304 (SCM-61)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
STOP	0	0	0	2.0	2.0	2.2	2.3	0	0	0	0	1.8	1.8	2.0	2.1	1.9	0.3	0		
REC	0	0	0	2.0	2.0	2.2	2.3	0	0	0	0	1.8	1.8	2.0	2.1	1.9	0.3	0		
Ref. No.	IC8306 (SCM-61)														IC8308 (SCM-61)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	I	G	O			
STOP	5.1	2.5	2.4	2.4	2.4	2.4	0	5.1	0	5.1	2.5	2.4	5.1	5.1	11.6	0	5.1			
REC	5.1	2.5	2.4	2.4	2.4	2.4	0	5.1	0	5.1	2.5	2.4	5.1	5.1	11.6	0	5.1			
Ref. No.	IC8309 (SCM-61)																IC8312 (SCM-61)			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	I	G	O	
STOP	1.0	1.0	0	0	0	0	0	0	0	1.0	1.0	0.9	0.9	0.9	1.0	5.1	11.6	0	5.1	
REC	1.0	1.0	0	0	0	0	0	0	0	1.0	1.0	0.9	0.9	0.9	1.0	5.1	11.6	0	5.1	
Ref. No.	IC8401 (SCM-62)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
EJECT	0	5.1	0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0	5.4	5.1	4.9	0	0	0	5.1	0.1	0.4
REC	0	5.1	0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0	5.4	5.1	4.9	0	0.1	0	5.1	0.1	0.4
Ref. No.	IC8401 (SCM-62)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
EJECT	0	5.1	5.1	1.0	0.2	0	5.1	0	0.1	0.1	5.1	5.1	5.1	0	0	0	5.1	0	5.1	5.1
REC	0	5.1	5.1	1.0	0.1	0	5.1	0	0.1	0.1	5.0	0	5.1	0	0	0	5.1	0	5.1	5.0
Ref. No.	IC8401 (SCM-62)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
EJECT	5.1	0.1	5.1	0	0	5.1	5.4	5.1	5.1	0	5.0	5.1	0	2.6	0	5.1	0	0	0	0
REC	5.1	0.1	5.1	0	0.1	0.1	5.4	5.0	5.1	0	5.0	5.1	0.2	2.5	0.2	5.1	0	0	0	0
Ref. No.	IC8401 (SCM-62)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
EJECT	2.9	0	0	0	0	1.3	5.4	2.3	5.1	0	3.0	0	1.9	2.4	1.7	1.2	5.4	0	5.1	0
REC	5.1	0	0	0	5.1	5.1	5.0	2.3	2.3	2.0	2.7	0	2.1	2.4	1.6	1.3	5.4	0	0.2	0
Ref. No.	IC8401 (SCM-62)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
EJECT	1.9	1.9	1.9	1.8	0	2.9	2.4	1.7	1.3	0.1	5.1	0	0.1	4.0	1.9	0	5.1	2.6	0	5.1
REC	1.9	1.9	1.5	2.1	0	3.1	2.4	1.6	1.3	0.1	5.1	0	0.1	4.1	2.0	0.2	5.1	0.2	0	0.1
Ref. No.	IC8401 (SCM-62)																			
Mode	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
EJECT	0.5	0	0.4	0.1	0.4	2.6	0	0	0	0	0	0	0	5.1	0	0	0	0	0	0
REC	0.5	0	0.4	0.2	0.4	2.6	0	0	0	0	0	0	0	5.1	0	0	0	0	0	0
Ref. No.	IC8401 (SCM-62)																			
Mode	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
EJECT	0	0	0	0	0	0	0	0	0	0	5.1	0	5.1	0	0	0	0	5.1	5.1	0
REC	0	0	0	0	0	0	0	0	0	0	5.1	4.6	5.1	0	0	0	0	5.1	0	0
Ref. No.	IC8401 (SCM-62)																			
Mode	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
EJECT	0	0	0	0	5.1	0.1	5.1	0.1	0.1	5.1	5.1	5.1	5.1	0	5.1	0	1.0	0	0	1.0
REC	0	0	5.1	0	0	0.1	5.1	0.1	5.1	5.1	5.1	0	5.1	0	0	0	1.0	0	0	0



Ref. No.	IC8401 (SCM-62)																			
Mode	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
EJECT	0	0	0	0	5.1	0	5.1	0	0	0	0	0	0	0	0	2.7	2.0	1.4	1.1	0
REC	0	0	0	0	5.1	0	5.1	5.1	0	0	0	0	0	0	0	0	2.1	1.4	0	1.0
Ref. No.	IC8401 (SCM-62)																			
Mode	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
EJECT	0	5.1	5.1	5.1	5.1	0	0	0	0	0	0	0	0	0	0	5.3	5.2	5.2	5.4	5.1
REC	0	5.1	5.1	0	0	0	0	0	5.1	0	0	0	0	0	5.3	5.3	5.4	5.4	5.4	5.1
Ref. No.	IC8401 (SCM-62)																			
Mode	201	202	203	204	205	206	207	208												
EJECT	5.1	5.4	0	0	5.4	0	0	2.3												
REC	0	0	0	0	5.4	0	0	0												
Ref. No.	IC8402 (SCM-62)														IC8403 (SCM-62)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	
STOP	0	0	0	0	0	0	0	1.0	1.0	0	1.0	0	1.0	5.1	0	0	0	0	5.1	
REC	0	0	0	0	0	0	0	1.0	1.0	0	1.0	0	1.0	5.1	0	0	0	0	5.1	
Ref. No.	IC8404 (SCM-62)(SCM-58)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	0	0	0.2	0	0	0	0	0	5.1	0	0	5.1	5.1						
REC	0	0	0	0.2	0	0	0	0	0	5.1	0	0	5.1	5.1						
Ref. No.	IC8501 (SCM-60)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.3	5.5	5.4	0	0	0	5.5	0	5.3	5.5	0	5.4	0	5.4	5.5	4.4	0	0	5.5	5.4
REC	5.2	5.4	5.4	0	0	0	0	0	5.2	5.4	0	5.4	0	0	5.4	4.4	0	0	0	5.4
Ref. No.	IC8501 (SCM-60)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.4	0	2.2	0	4.7	0	0	5.4	5.4	5.4	0	0	0	5.4	5.4	5.4	5.4	2.6	2.6	0
REC	5.4	0	2.2	0	4.7	0	0	5.4	5.4	5.4	0	0	5.1	0.3	0	0	0.3	2.6	2.6	0
Ref. No.	IC8501 (SCM-60)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.6	2.4	0	0	0	0	0	0	0.3	0.3	0.3	0.3	4.7	5.0	0	0	0.3	0.3	0.3	2.7
REC	0	0	0	5.4	5.4	5.4	5.4	5.4	5.4	5.4	4.9	0	4.7	5.0	0	0	0	0	0	2.7
Ref. No.	IC8501 (SCM-60)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	2.7	0	2.7	0	2.7	0	5.4	0	0	5.4	3.7	0	0	0.1	4.5	4.5	1.1	0	2.7	2.7
REC	2.7	0	2.7	0	2.7	0	5.4	0	0	5.4	3.7	0	0	2.3	2.3	1.1	0	0	2.7	2.7
Ref. No.	IC8501 (SCM-60)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	1.1	1.1	0	5.4	0	0	0	0	0	2.9	0	5.4	5.4	5.4	5.4	0	0	2.5	2.6	0
REC	1.2	1.2	0	5.4	0	0	0	0	0	2.9	0	5.4	5.4	5.4	5.4	0	0	2.5	2.6	0
Ref. No.	IC8501 (SCM-60)																			
Mode	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.7	4.0	0	5.1	0	0	0	0	5.4	5.4	5.4	0	0	5.4	0	0	5.4	5.4	0	0
REC	2.7	4.0	0	5.1	0	0	0	0	0	0	0	0	0	0	0	0	5.4	0	0	0
Ref. No.	IC8501 (SCM-60)								IC8502 (SCM-60)											
Mode	121	122	123	124	125	126	127	128	1	2	3	4	5	6	7	8				
STOP	0	0	0	0	0	5.4	0	0	2.7	2.7	2.7	0	0	0	0	5.4				
REC	0	0	5.4	0	0	0	5.4	0	2.7	2.7	2.7	0	0	0	0	5.4				
Ref. No.	IC8503 (SCM-60)														IC8504 (SCM-60)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	G	V	O			
STOP	5.1	5.4	0	2.7	0	2.5	0	2.7	2.7	0.6	2.7	2.7	5.4	5.4	0	4.7	4.7			
REC	5.1	5.4	0	2.7	0	2.5	0	2.7	2.7	0.6	2.7	2.7	5.4	5.4	0	4.7	4.7			
Ref. No.	IC8506 (SCM-60)																			
Mode	1	2	3	4	5	6	7	8												
STOP	4.0	0.9	0.6	0	0	5.4	0	5.4												
REC	4.0	0.9	0.6	0	0	5.4	0	5.4												
Ref. No.	Q8101 (SCM-58)				Q8102 (SCM-58)				Q8103 (SCM-58)				Q8201 (SCM-59)				Q8202 (SCM-59)			
Mode	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
STOP	9.0	11.5	9.6	9.6	0	9.0	2.3	2.4	0	-1.0	4.7	-0.4	0.9	4.7	1.5	-0.7	9.2	-0.1		
REC	9.0	11.5	9.6	9.6	0	9.0	2.3	2.4	0	-1.0	4.7	-0.4	0.9	4.7	1.5	-0.7	9.2	-0.1		



Ref. No. Mode	Q8204 (SCM-59)			Q8205 (SCM-59)			Q8206 (SCM-59)			Q8207 (SCM-59)									
	E	C	B	E	C	B	E	C	B	E	C	B							
STOP	3.4	9.2	4.0	-0.7	9.2	-0.1	3.4	9.2	4.0	-1.0	4.7	-0.4							
REC	3.4	9.2	4.0	-0.7	9.2	-0.1	3.4	9.2	4.0	-1.0	4.7	-0.4							
Ref. No. Mode	QR8101 (SCM-58)			QR8102 (SCM-64)			QR8501 (SCM-60)			QR8502 (SCM-60)			QR8503 (SCM-60)						
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B				
STOP	0	5.0	0	0	0	0	0	0.1	4.1	0	5.4	0	0	2.3	0				
REC	0	5.0	0	0	0	0	0	5.4	0	0	5.4	0	0	2.3	0				



## TBC (2) C.B.A.

Ref. No.	IC8601 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.8	4.3	4.5	5.2	5.2	4.5	4.5	4.5	4.3	9.0	5.1	0	0	8.6	8.9	0.4	6.7	2.4	5.2	0
REC	4.0	4.5	4.6	5.4	5.3	4.6	4.6	4.6	4.4	9.2	5.3	0	0	8.8	9.1	0.4	6.9	2.5	5.3	0
Ref. No.	IC8602 (SCM-65)(SCM-66)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.1	0.1	0	4.2	0	5.1	0	0	4.0	0	-0.5	0	-5.0	5.1						
REC	0.1	0.1	0	4.4	0	5.1	0	0	4.0	0	-0.5	0	-5.0	5.1						
Ref. No.	IC8603 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.1	5.1	5.1	5.1	0	0	5.1	0	0	5.1	5.0	5.1	0	0	5.1	5.1				
REC	5.1	5.1	5.1	5.1	0	0	5.1	0	0	5.1	5.0	5.1	0	0	5.1	5.1				
Ref. No.	IC8604 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	5.1	5.0	5.1	0	0	5.0	0	0	5.1	5.0	5.1	0	0	5.1	5.1				
REC	0	5.3	5.1	5.3	0	0	5.3	0	0	5.3	5.2	5.4	0	0	5.3	5.3				
Ref. No.	IC8605 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	0	0	-5.0	0	0	0	11.6												
REC	0	0	0	-5.0	0	0	0	11.6												
Ref. No.	IC8606 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.1	4.9	4.9	5.1	2.4	0	3.2	0	0	1.3	4.9	1.8	0	0	4.9	5.1				
REC	5.2	5.0	5.0	5.2	2.3	0	3.2	0	0	1.2	4.9	1.7	0	0	4.9	5.1				
Ref. No.	IC8607 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.3	5.1	0	5.1	5.1	0	0	5.0	0.2	0	5.1	5.1	0	5.1						
REC	0.4	5.1	0	5.1	5.1	0	0	5.0	0.2	0	5.3	5.3	0	5.3						
Ref. No.	IC8608 (SCM-65)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	2.7	2.7	5.1	2.5	0.4	0	1.9	0	3.8	0	0	0	5.1						
REC	0	2.8	2.8	5.2	2.5	0.5	0	1.9	0	3.8	0	0	0	5.1						
Ref. No.	IC8609 (SCM-65)								IC8613 (SCM-65)											
Mode	1	2	3	4	5	6	7	8	1	2	3									
STOP	2.3	2.7	2.7	-5.0	0	0	0	4.9	9.1	0	11.6									
REC	2.3	2.7	2.7	-5.0	0	0	0	4.9	9.1	0	11.6									
Ref. No.	IC8671 (SCM-66)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-5.0	0	0	0	0	0	0	0	0	4.9				
REC	0	0	0	0	0	0	-5.0	0	0	0	0	0	0	0	0	4.9				
Ref. No.	IC8672 (SCM-66)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	0	0	-5.0	0	0.4	0	9.1												
REC	0	0	0	-5.0	0	0.4	0	9.1												
Ref. No.	IC8673 (SCM-66)														IC8674 (SCM-66)					
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3			
STOP	0	0	0	2.2	5.1	5.1	0	3.8	2.2	0	2.2	1.9	-5.0	5.1	9.2	0	11.6			
REC	0	0	0	2.2	5.1	5.1	0	3.8	2.1	0	2.2	1.9	-5.0	5.1	9.2	0	11.6			
Ref. No.	IC8701 (SCM-67)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.1	0	5.1	0	0	0	0	0	0	3.4	3.4	0	0	0	0	2.6	5.1	0	2.6	5.1
REC	5.1	0	5.1	0	0	0	0	0	0	3.4	3.4	0	0	0	0	2.6	5.1	0	2.6	5.1
Ref. No.	IC8701 (SCM-67)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	2.6	5.1	0	5.1	0.5	0	0	0	0	0	5.1	2.5	5.1	5.1	0	5.1	0	0	0	5.1
REC	2.6	5.1	0	5.1	0.5	0	0	0	0	0	5.1	2.5	5.1	5.1	0	5.1	0	0	0	5.1
Ref. No.	IC8701 (SCM-67)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.6	5.1	0	0	0	1.4	2.7	2.5	0	2.7	5.1	2.5	2.5	2.4	2.5	0	2.6	2.6	5.1	0
REC	2.5	5.1	0	0	0	1.4	2.7	2.5	0	2.7	5.1	2.5	2.5	2.4	2.5	0	2.6	2.6	5.1	0



Ref. No.	IC8701 (SCM-67)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	2.5	5.1	5.1	5.1	5.1	5.1	2.4	0	4.2	5.1	0	0	5.1	1.8	1.8	3.8	0	0	3.4	2.6
REC	2.5	5.1	5.1	5.1	5.1	5.1	2.4	0	4.2	5.1	0	0	5.1	1.8	1.8	3.8	0	0	3.4	2.6
Ref. No.	IC8701 (SCM-67)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	2.6	5.1	5.1	0.4	5.1	0	0	0	0	5.1	5.1	0	5.1	0	0	5.1	3.4	5.1	0	0
REC	2.6	5.1	5.1	0.4	5.1	0	0	0	0	5.1	5.1	5.1	0	5.1	0	5.1	3.4	0	0	0
Ref. No.	IC8701 (SCM-67)																			
Mode	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	5.1	0.8	5.1	0	0	5.1	0	5.1	0	0	0	0	0.4	0.4	2.6	0.2	5.1	0.2	0	0.1
REC	5.1	0.8	5.1	0	0	5.1	5.1	5.1	0	0	0	0	0.4	2.6	0.2	1.0	0.4	0.2	0	0.1
Ref. No.	IC8701 (SCM-67)																			
Mode	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
STOP	1.0	1.2	5.1	5.1	0.2	0.2	5.1	5.1	5.1	3.4	5.1	0	5.1	0	5.1	5.1	5.1	0	5.1	5.1
REC	1.0	1.2	0.8	5.1	0.2	5.1	5.1	5.1	5.1	3.4	5.1	0	5.1	0	5.1	5.1	0	0	5.1	5.1
Ref. No.	IC8701 (SCM-67)										IC8702 (SCM-67)									
Mode	141	142	143	144	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STOP	5.1	5.1	0	0	5.2	5.2	5.2	5.2	0	0	5.2	0	0	5.2	5.2	5.2	0	0	3.6	5.2
REC	5.1	5.1	0	0	5.1	5.1	5.1	5.1	0	0	5.1	0	0	5.1	5.1	5.1	0	0	3.6	5.1
Ref. No.	IC8703 (SCM-67)										IC8704 (SCM-67)									
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	
STOP	1.0	4.1	2.5	2.7	2.5	2.5	0	2.6	2.6	2.4	2.7	2.5	2.5	5.1	0.2	0.2	0	0.1	5.2	
REC	1.0	4.1	2.5	2.6	2.5	2.5	0	2.6	2.6	2.4	2.6	2.5	2.5	5.1	0.2	0.2	0	0.1	5.1	
Ref. No.	IC8705 (SCM-67)								IC8706 (SCM-67)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-5.1	0	0	0	9.2	0.4	4.9	0.4	0	4.5	0	4.5	4.9				
REC	0	0	0	-5.1	0	0	0	9.1	0.4	4.9	0.4	0	4.5	0	4.5	4.9				
Ref. No.	IC8801 (SCM-68)								IC8802 (SCM-68)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-4.8	0	0	0.1	4.8	2.7	3.4	2.1	0	2.1	3.4	2.7	4.8				
REC	0	0	0	-4.8	0	0	0.1	4.8	2.7	3.4	2.1	0	2.1	3.4	2.8	4.8				
Ref. No.	IC8803 (SCM-68)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0.2	5.3	5.2	0.2	0	4.9	0	0.1	5.3	5.3	5.1	0.1	0	5.1	5.3				
REC	0	0.2	5.3	5.2	0.2	0	4.9	0	0.1	5.3	5.3	5.1	0.1	0	5.1	5.3				
Ref. No.	IC8804 (SCM-68)								IC8805 (SCM-68)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0.3	0	0	-4.8	0	0	-0.5	-4.8	0.5	0	0	-4.8	0	0	0	4.8				
REC	0.4	0	0	-4.8	0	0	0	4.8	0.5	0	0	-4.8	0	0	0	4.8				
Ref. No.	IC8806 (SCM-68)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.2	1.7	2.8	2.9	3.5	2.9	4.8	2.2	1.7	2.9	0	1.8	1.4	1.4	4.8	4.1	5.1	3.0	0	3.5
REC	2.2	1.7	2.8	2.9	3.5	2.9	4.8	2.2	1.7	2.9	0	1.8	1.4	1.4	4.8	4.1	5.1	5.0	0	3.5
Ref. No.	IC8806 (SCM-68)					IC8807 (SCM-68)														
Mode	21	22	23	24	1	2	3	4	5											
STOP	2.9	2.8	1.7	2.2	0	0.1	0	5.1	5.3											
REC	3.2	2.8	1.7	2.2	0	0.1	0	5.1	5.3											
Ref. No.	IC8808 (SCM-68)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0.1	-2.9	-3.1	-3.0	0	-4.9	0	2.6	1.0	4.8	0	0	0	0	4.8				
REC	0	0.1	-2.9	-3.1	-3.0	0	-4.9	0	2.6	1.0	4.8	0	0	0	0	4.8				
Ref. No.	IC8809 (SCM-68)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0.2	5.1	1.0	0.5	5.3	0	0	0.2	0	0	5.1	4.3	1.0	5.3						
REC	0.2	5.1	1.0	0.4	5.3	0	0	0.2	0	0	5.1	4.3	1.0	5.3						
Ref. No.	IC8810 (SCM-68)								IC8811 (SCM-68)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5							
STOP	3.5	1.0	1.0	-5.0	0	0	0	11.6	0.3	0	0	0.1	4.8							
REC	3.5	1.0	1.0	-5.0	0	0	0	11.6	0.3	0	0	0.1	4.8							



Ref. No.	IC8812 (SCM-68)																	
Mode	1	2	3	4	5	6	7	8										
STOP	0.1	0.1	0.1	-5.0	0.2	0.2	0.2	11.6										
REC	0.1	0.1	0.1	-5.0	0.2	0.2	0.2	11.6										
Ref. No.	Q8671 (SCM-66)			Q8672 (SCM-66)			Q8673 (SCM-66)			Q8701 (SCM-67)			Q8801 (SCM-68)			Q8802 (SCM-68)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	3.2	0	2.6	4.8	7.0	9.2	7.9	4.8	9.1	-0.4	4.9	0	0.7	4.8	1.3	-0.6	4.8	0.1
REC	3.2	0	2.6	4.8	7.0	9.2	7.9	4.8	9.1	-0.4	5.0	0	0.7	4.8	1.3	-0.6	4.8	0.1
Ref. No.	Q8803 (SCM-68)			Q8804 (SCM-68)			Q8805 (SCM-68)			Q8806 (SCM-68)			Q8808 (SCM-68)			Q8809 (SCM-68)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	-0.6	4.8	0	0	-4.8	-0.6	-0.4	4.8	0.2	-0.1	4.8	0.5	-0.5	4.9	0.1	-0.5	4.9	0.1
REC	-0.6	4.8	0	0	-4.8	-0.6	-0.4	4.8	0.2	-0.1	4.8	0.5	-0.5	4.9	0.1	-0.5	4.9	0.1
Ref. No.	Q8810 (SCM-68)			Q8811 (SCM-68)			Q8812 (SCM-68)			Q8813 (SCM-68)			Q8814 (SCM-68)			Q8815 (SCM-68)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.8	-1.8	0	0.2	4.9	0.8	0.8	-1.8	0	0.2	4.9	0.8	-0.4	4.8	0	-0.3	4.8	0
REC	0.8	-1.8	0	-0.5	4.9	0.1	0.8	-1.8	0	0.2	4.9	0.8	-0.4	4.9	0	-0.3	4.9	0
Ref. No.	Q8816 (SCM-68)			Q8817 (SCM-68)			Q8818 (SCM-68)			Q8819 (SCM-68)			Q8820 (SCM-68)			Q8821 (SCM-68)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	-0.2	-4.9	0	0.6	2.7	0.1	0.2	-4.9	-0.1	0.1	-4.9	0	0.5	2.7	0.1	0.1	-4.9	-0.1
REC	-0.2	-4.9	0	0.6	2.7	0.1	0.2	-0.1	-4.9	0.1	-4.9	0	0.5	2.7	0.1	0.1	-4.9	-0.1
Ref. No.	Q8822 (SCM-68)			Q8823 (SCM-68)			Q8824 (SCM-68)			Q8825 (SCM-68)			Q8827 (SCM-68)			Q8828 (SCM-68)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.6	2.7	0.3	0.4	-4.9	0.1	2.6	11.6	3.3	0.3	10.6	0.9	0.4	11.6	1.0	0.1	11.6	-0.1
REC	0.6	2.7	0.3	0.4	-4.9	0.1	2.7	11.6	3.3	0.3	11.6	0.9	0.4	11.6	1.0	0.1	11.6	-0.1
Ref. No.	Q8832 (SCM-68)																	
Mode	1	2	3	4	5													
STOP	0	0	5.1	0	5.1													
REC	0	0	5.1	0	5.1													



## AUDIO (1) C.B.A.

Ref. No.	IC40001 (SCM-37)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	4.8	4.9	4.9	4.9	4.9	10.3	4.9	4.9	4.9	9.8	4.8	4.9	-0.1	-0.2	8.9				
REC	0	4.8	4.9	4.9	4.9	4.9	10.3	4.9	4.9	4.9	9.8	4.8	4.9	0	0	8.9				
Ref. No.	IC40002 (SCM-37)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.3	5.3	5.4	5.3	5.3	5.3	5.1	0	0	5.3	5.4	5.3	0	8.1	7.9	10.6				
REC	5.3	5.3	5.4	5.3	5.2	5.3	5.1	0	0	5.3	5.4	5.3	0	8.1	7.9	10.6				
Ref. No.	IC40003 (SCM-37)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	4.8	4.9	4.9	4.9	4.9	10.3	4.9	4.9	4.9	9.8	4.9	4.9	-0.1	-0.1	8.9				
REC	0	4.8	4.9	4.9	4.9	4.9	10.3	4.9	4.9	4.9	9.8	4.9	4.9	0	0	8.9				
Ref. No.	IC40004 (SCM-37)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.3	5.3	5.4	5.3	5.3	5.3	5.1	0	0	5.3	5.4	5.3	0	8.1	7.9	0				
REC	5.3	5.3	5.4	5.3	5.2	5.3	5.1	0	0	5.3	5.4	5.3	0	8.1	7.9	10.6				
Ref. No.	IC40005 (SCM-37)								IC40006 (SCM-38)				IC40007 (SCM-38)							
Mode	1	2	3	4	5	6	7	8	1	2	3	1	2	3						
STOP	0.1	0	0	-12.1	0	0	0.1	11.5	4.7	4.7	0	5.1	5.1	0						
REC	0	0	0	-12.1	0	0	0	11.5	4.7	4.7	0	5.1	5.1	0						
Ref. No.	IC40008 (SCM-38)																			
Mode	1	2	3	4	5	6	7													
STOP	2.5	0.6	0.1	0	1.1	4.8	10.0													
REC	2.5	0.7	0.1	0	1.1	4.8	9.8													
Ref. No.	IC40009 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0.5	0	0	0	0	0	-6.2	0	0	5.5	5.5	0	0.1	0	0	6.0				
REC	0	0	0	0	0	0	-6.2	0	0	0.1	0.1	0	0	0	0	5.9				
Ref. No.	IC40010 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	5.1	0	0	0	0	0	5.2	5.1	4.2	0	0.5	5.1	5.2				
REC	0	5.1	5.1	5.1	0	5.1	5.1	0	5.1	5.1	5.0	4.3	0	0.4	5.1	5.1				
Ref. No.	IC40011 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.1	0	0	0	0	5.2	0	0	0	5.2	5.1	4.2	0	0	0	5.2				
REC	5.1	0	0	5.1	0	5.1	5.1	0	5.1	5.1	5.0	4.3	0	5.1	0	5.1				
Ref. No.	IC40012 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.1	0	0	0	0	5.2	0	0	0.1	5.2	5.1	4.3	0	0	0	5.2				
REC	5.1	5.1	0	0	0	5.1	0	0	0.1	5.1	5.0	4.3	0	5.1	0	5.1				
Ref. No.	IC40013 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	5.1	0	0	0	0	0	11.6	11.1	11.6	0	11.6	11.1	11.6				
REC	5.1	5.1	0	5.1	5.1	5.1	0	0	0	11.5	0	0	0	11.5	0	0				
Ref. No.	IC40014 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	5.2	5.2	0	0	0	0	9.9	9.9	11.7	3.7	10.3				
REC	0	5.1	5.1	0	0	5.1	5.1	0	0	0	0	9.8	9.7	0	0.1	10.2				
Ref. No.	IC40015 (SCM-38)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	5.2	0	0	0	5.5	11.6	0.7	11.3	11.6	0.1				
REC	0	0	0	0	0	5.1	5.1	0	0.1	0	0.1	11.5	0.7	11.2	11.5	0.3				
Ref. No.	IC40016 (SCM-39)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.6	5.6	5.6	5.4	0	0	0	5.6	5.4	5.6	5.6	9.8	9.8	10.9						
REC	5.6	5.6	5.6	5.4	0	0	0	5.6	5.4	5.6	5.6	9.8	9.8	10.8						
Ref. No.	IC40017 (SCM-39)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.4	5.6	5.5	5.7	5.7	5.6	0	0	0	0	0	5.6	5.4	5.6	5.6	10.9				
REC	5.4	5.6	5.5	5.6	5.6	0	0	0	0	0	0	5.6	5.4	5.6	5.6	10.8				



Ref. No.	IC40018 (SCM-39)								IC40019 (SCM-39)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	5.7	5.7	5.6	0	5.6	5.7	5.7	10.9	5.7	5.7	5.6	0	5.6	5.7	5.7	10.9				
REC	5.6	5.6	5.6	0	5.6	5.6	5.6	10.8	5.6	5.6	5.6	0	5.6	5.6	5.6	10.8				
Ref. No.	IC40020 (SCM-39)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	10.8	4.8	4.3	5.5	10.7	0	0	2.7	0	2.7	0	0	4.3	4.8						
REC	10.8	4.8	4.2	5.5	10.6	0	0	2.7	0	2.7	0	0	4.3	4.8						
Ref. No.	IC40021 (SCM-38)																			
Mode	1	2	3	4	5															
STOP	4.8	4.7	0	5.1	5.2															
REC	4.8	4.7	0	5.1	5.1															
Ref. No.	Q40001 (SCM-37)			Q40002 (SCM-37)			Q40003 (SCM-37)			Q40004 (SCM-37)			Q40005 (SCM-37)			Q40006 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0.7	0	0	0.7	9.9	9.9	9.2	0	0	0	0	0.1	0		
REC	0	0	0.7	-5.4	0	-24.2	-5.2	0	-24.3	9.9	-25.6	9.9	0	0	0	0	0.3	0		
Ref. No.	Q40007 (SCM-37)			Q40008 (SCM-37)			Q40009 (SCM-37)			Q40010 (SCM-37)			Q40011 (SCM-37)			Q40012 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	5.3	0	4.7	10.6	11.6	11.3	0	0	0	11.6	0	11.6	0.2	0	0	11.6	0	11.6		
REC	5.3	0	4.7	10.6	11.5	11.3	0.8	10.9	1.3	11.1	11.0	10.4	-4.1	1.2	-5.7	11.5	-6.1	11.5		
Ref. No.	Q40013 (SCM-37)			Q40014 (SCM-37)			Q40015 (SCM-37)			Q40016 (SCM-37)			Q40017 (SCM-37)			Q40018 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.2	0	0	0	0.3	0.3	0	0.3	0.3	11.6	0.3	11.6	11.6	0	11.6	0	0	0		
REC	-4.1	0	-5.7	0.3	0.1	11.2	0.3	11.2	0.1	11.3	11.2	10.6	11.0	10.8	10.3	0.6	10.7	1.0		
Ref. No.	Q40019 (SCM-37)			Q40020 (SCM-37)			Q40021 (SCM-37)			Q40022 (SCM-37)			Q40023 (SCM-37)			Q40024 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.2	0	0	0	0	-0.1	0	0	0	0.2	7.8	0.7	0.2	7.8	0.7	0	0	0		
REC	10.8	10.8	10.1	0	0	0.4	0	0	0.4	0.2	7.7	0.7	0.2	7.7	0.7	0	0	-0.1		
Ref. No.	Q40025 (SCM-37)			Q40026 (SCM-37)			Q40027 (SCM-37)			Q40028 (SCM-37)			Q40029 (SCM-37)			Q40030 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0.7	9.8	9.8	9.1	0	0	0.7	0	0	0	0	0.1	0		
REC	0	0	0.7	-3.7	0	-22.7	9.8	-22.5	9.8	-3.7	0	-22.3	0	0	0	0	0.2	0		
Ref. No.	Q40031 (SCM-37)			Q40032 (SCM-37)			Q40033 (SCM-37)			Q40034 (SCM-37)			Q40035 (SCM-37)			Q40036 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	5.3	0	4.7	10.6	11.6	11.3	0.3	0	0	11.6	0	11.6	11.6	0	11.6	0	0	0		
REC	5.3	0	4.6	10.6	11.6	11.3	-4.3	0.7	-5.9	11.5	-5.8	11.5	11.1	11.0	10.4	0.8	10.9	1.3		
Ref. No.	Q40037 (SCM-37)			Q40038 (SCM-37)			Q40039 (SCM-37)			Q40040 (SCM-37)			Q40041 (SCM-37)			Q40042 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	-0.1	0	0	0	0	-0.1	0	0	-0.1	11.6	0	11.6	0.2	7.7	0.7	0.2	7.7	0.7		
REC	10.8	10.8	10.1	0	0	0.3	0	0	0.3	11.0	10.8	10.2	0.2	7.7	0.7	0.2	7.7	0.7		
Ref. No.	Q40043 (SCM-37)			Q40044 (SCM-37)			Q40045 (SCM-38)			Q40046 (SCM-38)			Q40047 (SCM-39)			Q40048 (SCM-39)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	-0.1	0.3	0	0	5.1	-0.1	5.0	11.6	0	11.6	10.9	11.6	11.6	4.9	10.9	5.5		
REC	0	0	-0.1	-4.3	0	-5.8	5.1	-0.2	5.0	11.5	0	11.5	10.9	11.6	11.6	4.8	10.8	5.5		
Ref. No.	Q40049 (SCM-37)																			
Mode	E	C	B																	
STOP	0	0	0																	
REC	0.7	10.7	1.0																	
Ref. No.	QR40001 (SCM-37)			QR40002 (SCM-37)			QR40003 (SCM-37)			QR40004 (SCM-37)			QR40005 (SCM-37)			QR40006 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	6.9	0	6.9	0	0	0	6.9	9.8	0	10.9	0	9.5	0	0	0	0		
REC	0	5.3	0	0	0	9.2	0	9.8	0	9.8	9.8	4.7	0	0	9.8	0	0	9.8		
Ref. No.	QR40007 (SCM-37)			QR40008 (SCM-37)			QR40009 (SCM-37)			QR40010 (SCM-37)			QR40011 (SCM-37)			QR40012 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	3.9	11.6	11.6	0	11.6	-0.1	11.6	11.6	0	11.6	0	0	0	0	0	0		
REC	0	0	3.8	11.5	11.5	0	11.5	0	11.5	11.5	0	11.5	0	0	0	0	0	0		
Ref. No.	QR40013 (SCM-37)			QR40014 (SCM-37)			QR40015 (SCM-37)			QR40016 (SCM-37)			QR40017 (SCM-37)			QR40018 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0.9	0	0	0.7	0	0	6.9	0	6.9	0	0	0	6.9	9.8	0	10.9		
REC	0	0	0.3	0	0	0.6	0	5.2	0	0	0	9.2	0	9.8	0	9.8	9.8	4.9		



Ref. No.	QR40019 (SCM-37)			QR40020 (SCM-37)			QR40021 (SCM-37)			QR40022 (SCM-37)			QR40023 (SCM-37)			QR40024 (SCM-37)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	9.5	0	11.6	11.6	0	11.6	0	11.5	11.6	0	11.5	0	0	0	0	0	0		
REC	0	0	9.8	11.5	11.5	0	11.5	0	11.5	11.5	0	11.5	0	0	0	0	0	0		
Ref. No.	QR40025 (SCM-37)			QR40026 (SCM-37)			QR40027 (SCM-37)			QR40028 (SCM-37)			QR40029 (SCM-39)			QR40030 (SCM-39)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	11.6	0.7	0	0	0.7	0	0	0.9	0	0	0	9.9	0	9.8	9.9	0	9.8		
REC	0	11.5	0.7	0	0	0.6	0	0	0	0	0	9.8	9.9	0	9.8	9.8	0	9.7		
Ref. No.	QR40031 (SCM-39)			QR40032 (SCM-39)																
Mode	E	C	B	E	C	B														
STOP	9.9	0	9.8	9.9	0	9.8														
REC	9.8	0	9.8	9.9	0	9.8														



# AUDIO (2) C.B.A.

Ref. No.	IC41001 (SCM-40)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.6	4.6	4.6	4.6	0	4.6	4.6	4.6	4.6	0.2	4.6	4.6	4.6	0	4.6	4.5	4.6	4.6	2.5	0
REC	4.6	4.6	4.6	4.6	0	4.6	4.6	4.6	4.6	0.2	4.6	4.6	4.6	0	4.6	2.5	4.6	4.6	2.5	0
Ref. No.	IC41001 (SCM-40)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	2.5	2.5	5.0	2.6	0	3.2	5.0	5.0	3.0	4.5	0	4.5	0	0	2.5	2.7	3.4	0	3.2	0
REC	2.5	2.5	5.0	2.6	0	3.2	5.0	5.0	3.0	4.5	0	4.5	0	0	2.5	2.7	3.4	0	3.2	0
Ref. No.	IC41001 (SCM-40)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.6	5.0	2.5	2.5	0	2.5	4.6	4.6	4.5	4.6	0	4.6	4.6	4.6	0.2	4.6	4.6	4.6	4.6	0
REC	2.6	5.0	2.5	2.5	0	2.5	4.6	4.6	4.5	4.6	0	4.6	4.6	4.6	0.2	4.6	4.6	4.6	4.6	0
Ref. No.	IC41001 (SCM-40)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	4.6	4.6	5.9	5.9	0	5.9	0.1	5.9	5.9	0.4	5.2	5.3	0	0	0.1	9.0	11.6	9.0	4.6	5.0
REC	4.6	4.6	5.9	5.9	0	5.9	-0.1	5.9	5.9	0.5	5.2	5.3	0	0	0.1	8.9	11.5	9.0	4.6	5.0
Ref. No.	IC41002 (SCM-40)								IC41003 (SCM-40)								IC41004 (SCM-41)			
Mode	1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8		
STOP	5.0	0	11.6	0	5.0	2.5	0	1.4	2.0	0	0	0	0	-6.3	0.8	0.7	5.8	6.3		
REC	5.0	0	11.5	0	5.0	2.5	0	1.4	2.0	0	0	0	0	-6.3	0.8	0.7	5.8	6.3		
Ref. No.	IC41005 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	3.0	2.9	0	3.0	3.0	0	6.0												
REC	0.5	3.0	2.9	0	2.9	3.0	0	5.9												
Ref. No.	IC41006 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-6.1	0	0	0	0	0	0	0	0	6.0				
REC	0	0	0	0	0	0	-6.1	0	0	0	0	0.5	0	0	0	5.9				
Ref. No.	IC41007 (SCM-41)								IC41008 (SCM-41)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-6.3	0	0	0	6.3	0.1	0	0	-6.1	0	0	0	6.0				
REC	0	0	0	-6.3	0	0	0	6.3	0	0	0	-6.1	0	0	0.1	5.9				
Ref. No.	IC41009 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	0	0	-6.1	0	0	0.1	6.0												
REC	0	0	0	-6.1	0	0	0.2	5.9												
Ref. No.	IC41010 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0.1	0	0	0	0	0	-6.1	0	0	6.0	0	0.1	0	0.1	0.1	6.0				
REC	0	0	0	0	0	0	-6.1	0	0	5.9	0	0	0	0	0	5.9				
Ref. No.	IC41011 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-6.3	0	6.3	0	0	0	0	0	0	6.3				
REC	0	0	0	0	0	0	-6.3	0	6.3	0	0	0	0	0	0	6.3				
Ref. No.	IC41012 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-6.3	0	6.3	6.3	6.3	0	0	0	0	6.3				
REC	0	0	0	0	0	0	-6.3	0	6.3	6.3	6.3	0	0	0	0	6.3				
Ref. No.	IC41013 (SCM-41)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	0	0	-6.3	0	0	0	6.3												
REC	0	0	0	-6.3	0	0	0	6.3												
Ref. No.	IC41014 (SCM-42)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0	0	0	0	-6.3	0	0	6.3	6.3	0	0	0	0	6.3				
REC	0	0	0	0	0	0	-6.3	0	0	6.3	6.3	0	0	0	0	6.3				
Ref. No.	IC41015 (SCM-42)								IC41016 (SCM-44)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-6.3	0	0	0	6.3	0	0	0	-11.5	0	0	0	10.9				
REC	0	0	0	-6.3	0	0	0	6.3	0	0	0	-11.5	0	0	0	10.8				



Ref. No.	IC41017 (SCM-44)																			
Mode	1	2	3	4	5	6	7	8												
STOP	0	0	0	-11.5	0	0	0	10.9												
REC	0	0	0	-11.5	0	0	0	10.8												
Ref. No.	Q41001 (SCM-40)			Q41002 (SCM-40)			Q41003 (SCM-40)			Q41004 (SCM-40)			Q41005 (SCM-40)					Q41006 (SCM-40)		
Mode	E	C	B	E	C	B	E	C	B	E	C	B	1	2	3	4	5	E	C	B
STOP	11.6	0	11.6	0	0	-0.3	0	0	-0.2	5.0	11.6	5.6	11.6	5.6	5.0	4.4	5.0	1.3	5.0	2.0
REC	11.6	11.4	10.7	0	0	-0.2	0	0	-0.2	4.9	11.5	5.5	11.5	5.5	4.9	4.3	4.9	2.4	5.0	3.0
Ref. No.	Q41007 (SCM-40)			Q41008 (SCM-41)			Q41009 (SCM-41)			Q41010 (SCM-41)			Q41011 (SCM-41)			Q41012 (SCM-41)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.4	5.0	0.9	0	0	-0.4	6.3	10.9	6.9	-6.3	-12.2	-7.0	0	0	0.7	-0.6	6.0	0		
REC	0.4	5.0	0.9	0	0	-0.4	6.3	10.8	6.9	-6.3	-12.2	-7.0	0	0	0	-0.7	5.9	0		
Ref. No.	Q41013 (SCM-41)			Q41014 (SCM-41)			Q41015 (SCM-41)			Q41016 (SCM-42)			Q41017 (SCM-42)			Q41018 (SCM-42)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	-0.3	0	0	0.7	0	0	0.7	6.3	11.6	6.9	0	0	-0.1	0	0	-0.3		
REC	0	0	-0.4	0	0	0.7	0	0	0.7	6.3	11.5	6.9	0	0	-0.3	0	0	-0.2		
Ref. No.	Q41019 (SCM-43)			Q41020 (SCM-43)			Q41021 (SCM-43)			Q41022 (SCM-43)			Q41023 (SCM-43)			Q41024 (SCM-43)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
REC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Ref. No.	Q41025 (SCM-43)			Q41026 (SCM-43)			Q41027 (SCM-43)			Q41028 (SCM-43)			Q41029 (SCM-43)			Q41030 (SCM-43)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0		
REC	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0		
Ref. No.	Q41031 (SCM-43)			Q41032 (SCM-43)			Q41033 (SCM-43)			Q41034 (SCM-43)			Q41035 (SCM-43)			Q41036 (SCM-44)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0	0	0	0.8	0	0	0	11.6	0	11.6	-11.5	-12.2	-12.2		
REC	0	0	0	0	0	0	0	0	0.3	0	0	0	11.5	0	11.5	-11.5	-12.2	-12.2		
Ref. No.	Q41037 (SCM-44)			Q41038 (SCM-44)			Q41039 (SCM-44)			Q41040 (SCM-44)			Q41041 (SCM-44)			Q41042 (SCM-44)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	-0.2	0	0	0.7	0	0	-11.5	0	0	0	0	0	0.7	0	0	-11.5		
REC	0	0	-0.2	0	0	0.7	0	0	-11.5	0	0	-0.1	0	0	0.7	0	0	-11.5		
Ref. No.	Q41043 (SCM-44)			Q41044 (SCM-44)			Q41045 (SCM-44)			Q41046 (SCM-44)			Q41047 (SCM-44)			Q41048 (SCM-44)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	-0.2	0	0	0.7	0	0	-11.5	0	0	-0.2	0	0	0.7	0	0	-11.5		
REC	0	0	-0.2	0	0	0.7	0	0	-11.5	0	0	0	0	0	0.7	0	0	-11.5		
Ref. No.	Q41049 (SCM-44)			Q41050 (SCM-43)			Q41051 (SCM-41)			Q41052 (SCM-41)			Q41053 (SCM-41)							
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B					
STOP	10.9	11.6	11.6	-12.2	0	-12.2	0	0.2	-0.4	0	0.1	-0.3	11.2	-0.2	11.4					
REC	10.8	11.5	11.5	-12.2	0	-12.2	0	0.2	-0.2	0	0.1	-0.1	11.1	-0.4	11.4					
Ref. No.	QR41002 (SCM-40)			QR41004 (SCM-40)			QR41005 (SCM-40)			QR41006 (SCM-41)			QR41007 (SCM-41)			QR41008 (SCM-43)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	5.0	-0.1	5.2	0	5.1	0	0	0	3.9	0	6.3	0	0	0.7	0	0	11.6	0		
REC	5.0	-0.1	5.1	0	5.1	0	0	0	3.8	0	6.3	0	0	0.7	0	0	11.5	0		
Ref. No.	QR41009 (SCM-43)			QR41010 (SCM-43)			QR41011 (SCM-43)			QR41012 (SCM-40)			QR41003 (SCM-40)							
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B					
STOP	11.6	-12.2	11.6	0	8.2	0	0	8.2	0	0	0	5.2	5.0	5.0	0					
REC	11.5	-12.2	11.5	0	2.8	3.2	0	2.8	3.2	0	0	5.1	5.0	5.0	0					



# INTERFACE C.B.A.

Ref. No.	IC61001 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.1	0.1	5.1	5.1	3.7	2.3	2.9	2.6	3.1	0	2.6	1.7	3.0	3.2	1.8	0.7	0.4	0.4	0.7	0.7
REC	5.1	0.1	5.1	5.1	3.7	2.3	2.9	2.6	3.1	0	2.6	1.7	3.0	3.2	1.8	0.7	0.4	0.4	0.7	0.7
Ref. No.	IC61001 (SCM-45)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0.7	4.5	0	0.7	0	2.6	5.1	0	0	2.1	2.2	1.8	2.6	2.2	2.7	2.2	2.3	0	5.1	2.6
REC	0.7	4.5	0	0.7	0	2.6	5.1	0	0	2.1	2.2	1.8	2.7	2.1	2.2	2.1	2.1	0	0.1	2.6
Ref. No.	IC51001 (SCM-45)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.1	5.4	5.4	5.1	0	0	0	5.1	4.6	2.5	0	0	0	5.1	5.1	0	5.1	4.9	4.8	0
REC	0.1	5.4	5.4	5.1	0	0	0	5.1	4.6	2.5	0	0	0	5.1	5.1	0	5.1	4.9	4.8	0
Ref. No.	IC61001 (SCM-45)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	5.1	5.1	4.9	2.1	2.2	4.8	4.8	2.2	0	2.3	0	5.1	2.1	2.1	5.1	5.1	5.1	5.1	5.1
REC	0	5.1	5.1	4.9	2.1	2.2	4.8	4.8	2.2	0	2.3	0	5.1	2.1	2.1	5.1	5.1	5.0	5.1	5.1
Ref. No.	IC61002 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.7	2.2	4.1	2.6	2.0	2.5	2.7	2.7	2.5	2.4	2.1	2.6	1.9	0	2.9	1.9	2.5	2.0	2.0	0.6
REC	0.7	2.2	4.1	2.7	2.0	2.5	2.7	2.7	2.5	2.4	2.1	2.6	2.0	0	2.9	1.9	2.5	2.0	2.0	0.6
Ref. No.	IC61002 (SCM-45)																			
Mode	21	22	23	24	25	26	27	28												
STOP	0.9	2.1	0.9	4.3	3.4	0.9	0.8	5.1												
REC	1.0	2.1	1.0	4.3	3.4	0.9	0.8	5.1												
Ref. No.	IC61003 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	4.1	2.5	2.7	2.7	2.5	2.4	5.1	0	5.1	5.1	5.1	2.1	2.6	1.9	2.9	2.0	2.6	5.1		
REC	4.1	2.5	2.7	2.7	2.5	2.4	5.1	0	5.1	5.1	5.1	2.1	2.6	1.9	2.9	2.0	2.6	5.1		
Ref. No.	IC61004 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	2.2	5.1	0
REC	0	5.1	0	0	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	2.2	5.1	0
Ref. No.	IC61004 (SCM-45)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	5.1	0	0	0	5.1	0	0	0	0	0	0	5.1	5.1	5.1	5.1	5.1	5.1	2.7
REC	0	0	5.1	0	0	0	5.1	0	0	0	0	0	0	5.1	5.1	5.1	5.1	5.1	5.1	2.7
Ref. No.	IC61004 (SCM-45)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	5.1	0	0	0	5.1	0.6	2.5	5.1	0	5.1	5.2	5.1	5.1	5.1	0.3	2.4	2.5	0	5.1	5.1
REC	5.1	0	3.2	0.1	0	0.6	2.5	5.1	0	5.1	5.2	5.1	5.1	5.1	0.3	2.4	2.5	0	5.1	5.1
Ref. No.	IC61004 (SCM-45)										IC61005 (SCM-45)									
Mode	61	62	63	64	1	2	3	4	5	6	7	8								
STOP	5.1	5.1	0	5.1	2.5	5.1	3.1	0	5.1	3.3	5.1	5.1								
REC	5.1	0	0	5.1	2.6	5.3	3.3	0	5.4	0.4	5.3	5.3								
Ref. No.	IC61006 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	5.0	5.0	0	5.1	0	5.1	0	5.1	0	5.0	5.1	5.1	5.0	0	5.1				
REC	0	9.1	8.8	0	5.9	0	5.1	0	5.1	0	5.0	5.1	5.1	6.1	0	6.5				
Ref. No.	IC61007 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.9	4.8	5.1	2.2	2.1	2.5	0	4.9	2.1	4.8	5.0	4.9	2.2	5.1						
REC	4.8	4.8	5.1	2.2	2.1	2.5	0	4.9	2.1	4.8	5.0	4.9	2.2	5.1						
Ref. No.	IC61008 (SCM-46)(SCM-45)										IC61009 (SCM-46)(SCM-45)									
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	3.4	0.1	5.1	0	4.1	0.6	5.1	5.1	4.9	4.7	0	0	5.1	0.4	0.2	5.1				
REC	3.4	0.1	5.1	0	4.1	0.6	5.1	5.1	4.9	4.7	0	0	5.1	0.4	0.2	5.1				
Ref. No.	IC61010 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	1.0	5.1	5.1	0	5.1	0	0	5.1	1.0	5.1	0	0	5.1	5.1						
REC	1.1	5.0	5.0	0.1	5.0	0.1	0	5.0	1.1	5.1	0	0	5.1	5.1						



Ref. No.	IC61011 (SCM-45)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	0	0.1	0	4.5	2.6	2.5	0	5.1	3.3	0.3	5.1	0.4	0.4	0	5.1				
REC	0	0	0.1	0	4.5	2.6	2.5	0	5.1	3.3	0.3	5.1	0.4	0.4	0	5.1				
Ref. No.	IC61013 (SCM-46)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	3.0	2.8	1.7	2.6	2.9	2.6	2.6	2.1	0	2.2	2.7	2.7	3.2	2.7	1.7	3.0	3.2	0	5.1
REC	0	3.0	2.8	1.7	2.6	2.9	2.4	2.7	2.1	0	2.2	2.8	2.5	3.0	2.7	1.7	2.9	3.0	0	5.1
Ref. No.	IC61014 (SCM-46)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.5	1.8	1.9	2.2	2.1	2.5	1.6	2.1	1.7	0	3.9	3.9	3.9	3.9	4.6	4.6	4.6	4.6	4.8	5.1
REC	2.5	1.8	1.9	2.2	2.1	2.5	1.6	2.1	1.7	0	3.8	3.8	3.9	3.9	4.6	4.6	4.6	4.6	4.8	5.1
Ref. No.	IC61015 (SCM-46)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0	0	0	0.2	0.2	4.9	2.5	4.8	0	4.8	2.5	4.9	0	0	0	0	0	0	5.1
REC	0	0	0	0	0	0	4.9	2.5	4.8	0	4.8	2.5	4.9	0	0	0	0	0	0	5.1
Ref. No.	IC61016 (SCM-46)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.4	2.9	2.6	0.4	1.6	0.7	5.1	0	5.1	5.1	4.9	5.1	5.1	5.1	5.0	5.1				
REC	2.4	2.9	2.6	0.4	1.6	0.7	5.1	0	5.1	5.1	4.9	5.1	5.1	5.1	5.0	5.1				
Ref. No.	IC61017 (SCM-48)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0.4	5.1	5.1	5.1	5.1	0	0	0	0	5.1	2.2	2.6	2.0	3.0	1.9	2.5	2.0	2.0	0
REC	4.4	0	0	0	5.1	5.1	0	0	0	0	5.1	2.2	2.7	2.0	3.0	1.9	2.6	2.0	2.0	0
Ref. No.	IC61017 (SCM-48)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	5.1	0	0	5.1	5.1	0	0	5.0	0	2.4	2.4	0	0	5.1	5.1	5.1	0.2	0	0.2
REC	0	5.1	0	0	5.1	5.1	0	0	5.0	0	2.5	2.4	0	0	0.8	5.1	5.1	1.0	0.1	0.1
Ref. No.	IC61017 (SCM-48)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	5.1	0	0	0	5.1	0	0	0	0	0	5.1	0	0	0	0	5.1	5.1	5.1
REC	0	0	5.1	0	0	0	5.1	0	0	0	0	0	5.1	0	0	0	0	5.1	5.1	5.1
Ref. No.	IC61017 (SCM-48)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	5.1	0	0	0	0	0	4.8	0	0	5.1	0	0	0	0	4.6	5.1	5.1	5.1	5.1	0
REC	5.1	0	0	0	0	0	4.8	0	0	5.1	0	0	0	0	5.0	5.0	2.6	2.5	2.5	2.5
Ref. No.	IC61018 (SCM-47)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.2	2.6	2.0	3.0	1.9	2.5	2.0	2.0	2.4	2.5	5.1	5.0	0	0	-5.0	0	0	0.2	0	2.5
REC	2.1	2.6	2.0	3.0	1.9	2.5	2.0	2.0	2.4	2.5	5.1	5.0	0	0	-5.0	0	0	0.2	0	2.5
Ref. No.	IC61018 (SCM-47)																			
Mode	21	22	23	24																
STOP	0	4.9	5.1	5.1																
REC	0	4.9	5.1	5.1																
Ref. No.	IC61019 (SCM-47)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.2	2.6	2.0	3.0	1.9	2.5	2.0	2.0	2.4	2.5	5.1	5.0	0	0	-5.0	0	0	2.2	1.9	2.5
REC	2.1	2.6	2.0	2.9	1.9	2.5	2.0	2.0	2.4	2.5	5.1	5.0	0	0	-5.0	0	0	2.2	1.9	2.5
Ref. No.	IC61019 (SCM-47)				IC61020 (SCM-47)															
Mode	21	22	23	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STOP	0	4.9	5.1	5.1	0	0	0	0.2	0.2	0	-5.0	0	0	0	0	0	0	0	0	4.9
REC	0	4.9	5.1	5.1	0	0	0	0	0	0	-4.9	0	0	0	0	0	0	0	0	4.9
Ref. No.	IC61021 (SCM-47)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	2.2	0	1.9	1.9	0	-5.0	0	0	0	0	0	0	0	2.2	4.9				
REC	0	2.2	0	1.9	2.0	0	-5.1	0	0	0.4	0.4	0	0	0	2.2	4.9				
Ref. No.	IC61022 (SCM-47)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.0	5.1	0	0	0	0	-5.0	0	0	0.2	0.2	5.1	2.1	5.1	5.1	4.9				
REC	1.6	5.1	0	0	0	0	-5.0	0	0	0.4	0.4	5.6	1.7	5.6	5.8	5.6				



Ref. No. Mode	IC61023 (SCM-48)																			
	1	2	3	4	5	6	7	8												
STOP	2.9	0	2.9	0	0	4.9	2.1	0												
REC	2.9	0	2.9	0	0	5.6	2.4	0												
Ref. No. Mode	Q61001 (SCM-45)			Q61002 (SCM-48)			Q61003 (SCM-48)													
	E	C	B	E	C	B	E	C	B											
STOP	5.1	5.0	4.3	2.0	4.9	2.6	2.0	4.9	2.6											
REC	5.1	5.0	4.3	2.0	4.9	2.6	2.0	4.9	2.6											



# FRONT C.B.A.

Ref. No.	IC62001 (SCM-50)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.1	5.1	5.1	5.1	5.1	2.6	2.5	0	5.2	0	0	0	0	0	0	0	0	0	0	-28.7
REC	2.0	5.1	5.1	5.1	5.1	2.6	2.5	0	5.1	0	0	0	1.2	0	1.2	0	0	0	0	-9.1
Ref. No.	IC62001 (SCM-50)																			
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	-28.7	-28.7	-28.7	-28.7	-28.7	-28.7	-28.7	-28.7	-0.1	5.2	-29.0	0	0	0	0	0	0	-28.9	-28.9	-28.9
REC	-9.3	-8.7	-12.1	-13.8	-13.7	-16.1	-26.4	-18.0	-3.3	5.1	-26.7	0	0	0	0	0	0	-24.1	-24.0	-24.0
Ref. No.	IC62001 (SCM-50)																			
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	-28.9	-28.9	-28.9	-28.9	-28.9	-28.9	-28.9	5.2	5.1	0	0	5.2	0	0	0	0	0	0	0	0
REC	-24.0	-24.0	-24.0	-24.0	-23.8	-23.8	-24.3	5.1	5.1	1.0	4.7	5.1	0	2.4	0	0	0	0	0	0
Ref. No.	IC62001 (SCM-50)																			
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	0	0	0	0.2	0.1	0.1	0.1	5.1	5.1	0	5.1	0	0	0	0	0	0	0
REC	4.7	0	0	0	0	3.8	3.8	3.8	3.8	5.1	0	0	5.1	0	2.5	0	0	0	0	0
Ref. No.	IC62001 (SCM-50)																			
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94						
STOP	0	0	0	0	5.2	5.2	0	5.1	5.1	5.1	5.1	0	0	0						
REC	0	5.1	3.8	5.1	5.1	5.1	0	5.1	5.1	5.1	5.1	0	0	0						
Ref. No.	IC62002 (SCM-50)								IC62003 (SCM-50)											
Mode	1	2	3	4	5	6	7	8	1	2	3									
STOP	0	2.5	0.2	0	4.6	2.5	5.1	5.1	5.1	5.1	0									
REC	0	2.5	0.2	0	4.6	2.5	5.1	5.1	5.1	5.1	0									
Ref. No.	Q62002 (SCM-51)			Q62003 (SCM-51)			Q62004 (SCM-51)			Q62005 (SCM-51)			Q62006 (SCM-51)			Q62007 (SCM-51)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	2.9	0.2	0	3.8	0	0	3.7	0	0	3.5	0	5.1	3.0	4.9	5.1	2.9	4.9		
REC	0	3.7	0	0	2.8	0.2	0	3.7	0	0	2.5	0.2	5.1	2.1	4.9	5.1	2.8	4.9		
Ref. No.	Q62008 (SCM-51)			Q62009 (SCM-51)																
Mode	E	C	B	E	C	B														
STOP	5.2	2.8	4.9	5.1	2.1	4.9														
REC	5.1	2.8	4.9	5.1	2.0	4.9														
Ref. No.	QR62001 (SCM-50)																			
Mode	E	C	B																	
STOP	0	0	4.6																	
REC	0	0	4.6																	



# REAR AMP C.B.A.

Ref. No.	IC4001 (SCM-74)								IC4002 (SCM-74)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
Ref. No.	IC4003 (SCM-74)								IC4004 (SCM-74)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
Ref. No.	IC4005 (SCM-74)								IC4006 (SCM-74)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
Ref. No.	IC4007 (SCM-74)								IC4008 (SCM-74)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.5	0	0	0	10.9	0	0	0	-11.5	0	0	0	10.9				
Ref. No.	IC4014 (SCM-73)								IC4015 (SCM-73)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.5	0	0	0	10.9	0	0	0	-11.5	0	0	0	10.9				
Ref. No.	IC4016 (SCM-73)								IC4017 (SCM-73)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-11.4	0	0	0	10.9	0	0	0	-11.4	0	0	0	10.9				
REC	0	0	0	-11.5	0	0	0	10.9	0	0	0	-11.5	0	0	0	10.9				
Ref. No.	IC6601 (SCM-72)								IC6605 (SCM-72)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	7.2	3.6	7.1	0	0	11.5	6.4	0	0	0	0	-4.4	0	0	0	4.4				
REC	7.2	3.6	7.1	0	0	11.5	6.4	0	0	0	0	-4.4	0	0	0	4.4				
Ref. No.	IC6606 (SCM-72)								IC6607 (SCM-72)											
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP	0	0	0	-4.4	0	0	0	4.4	0	0	0	-4.4	0	0	0	4.4				
REC	0	0	0	-4.4	0	0	0	4.4	0	0	0	-4.4	0	0	0	4.4				
Ref. No.	IC6608 (SCM-72)								IC6609 (SCM-72)								IC6610 (SCM-72)			
Mode	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	
STOP	3.2	0	0	-4.4	0	0	0	4.4	0	0	0	-4.4	0	0	0	4.4	0	4.9	4.9	
REC	3.2	0	0	-4.4	0	0	0	4.4	0	0	0	-4.4	0	0	0	4.4	0	4.9	4.9	
Ref. No.	IC6611 (SCM-72)																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	5.0	4.9	2.2	2.1	4.8	4.1	0.1	0.5	4.8	0	1.1	1.1	0.7	2.0	0.6	0.8	4.8	0.3	0.2
REC	0	5.0	4.9	2.2	2.1	4.8	4.1	0.1	0.5	4.8	0	1.1	1.1	0.7	2.0	0.6	0.9	4.8	0	0
Ref. No.	IC6611 (SCM-72)												IC6612 (SCM-72)							
Mode	21	22	23	24	25	26	27	28	29	30	31	32	1	2	3	4	5			
STOP	0	0.1	0.1	0	0	0	4.7	2.3	2.3	4.5	4.9	4.9	0	4.5	0	0.1	4.9			
REC	0	0.1	0	0	0	0	4.7	2.3	2.3	4.5	4.9	4.9	0	4.5	0	0.1	4.9			
Ref. No.	Q4001 (SCM-74)			Q4002 (SCM-74)			Q4003 (SCM-74)			Q4004 (SCM-74)			Q4005 (SCM-74)			Q4006 (SCM-74)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
REC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Ref. No.	Q4007 (SCM-74)			Q4008 (SCM-74)			Q4010 (SCM-73)			Q4011 (SCM-73)			Q4015 (SCM-73)			Q4016 (SCM-73)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	0	0	0	0	10.9	11.6	11.6	-11.5	-12.2	-12.1	0	0	-0.1	0	0	-0.1		
REC	0	0	0	0	0	0	10.8	11.6	11.6	-11.5	-12.2	-12.1	0	0	-0.1	0.1	0	-0.1		
Ref. No.	Q4017 (SCM-73)			Q4021 (SCM-73)			Q4022 (SCM-73)			Q4023 (SCM-73)			Q4027 (SCM-73)			Q4028 (SCM-73)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.1	-0.2	0	-0.2	0	0	-0.2		
REC	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.2	0.1	0	-0.2		
Ref. No.	Q4029 (SCM-73)			Q4033 (SCM-73)			Q4034 (SCM-73)			Q4035 (SCM-73)			Q4036 (SCM-73)			Q4037 (SCM-74)				
Mode	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B		
STOP	0.1	0	-0.2	0	0	-0.1	0	0	-0.1	0	0	-0.1	11.2	-0.1	11.4	-11.5	-12.2	-12.1		
REC	0	0	-0.3	0	0	-0.1	0	0	-0.1	0	0	-0.1	11.2	-0.2	11.4	-11.5	-12.2	-12.1		



Ref. No. Mode	Q4038 (SCM-74)			Q6601 (SCM-72)			Q6602 (SCM-72)			Q6603 (SCM-72)			Q6606 (SCM-72)								
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B						
STOP	10.9	11.6	11.6	-0.7	4.9	0	0	4.9	0	0	5.1	0	4.9	-4.7	4.2						
REC	10.9	11.6	11.5	-0.7	4.9	0	0	4.9	0	0	5.1	0	4.9	-4.7	4.2						
Ref. No. Mode	Q6609 (SCM-72)						Q6610 (SCM-72)						Q6611 (SCM-72)								
	1	2	3	4	5	6	1	2	3	4	5	6	E	C	B						
STOP	4.8	1.7	1.1	4.8	1.3	1.7	0.5	0.5	-0.2	4.8	0.5	-0.2	-0.8	4.8	-0.2						
REC	4.8	1.7	1.1	4.8	1.3	1.7	0.4	0.4	-0.2	4.8	0.4	-0.2	-0.8	4.8	-0.2						
Ref. No. Mode	Q6612 (SCM-72)						Q6613 (SCM-72)														
	1	2	3	4	5	6	E	C	B												
STOP	-4.9	-0.8	-0.2	-4.9	-0.8	-0.2	0.8	-4.2	0.2												
REC	-4.9	-0.8	-0.2	-4.9	-0.8	-0.2	0.8	-4.2	0.2												
Ref. No. Mode	QR6603 (SCM-72)			QR6605 (SCM-72)			QR6606 (SCM-72)			QR6607 (SCM-72)											
	E	C	B	E	C	B	E	C	B	E	C	B									
STOP	0	0	3.6	4.4	0.3	4.8	0	4.8	0	0	4.8	0.1									
REC	0	0	3.6	4.4	0.5	4.8	0	4.8	0	0	4.9	0.1									



**Panasonic®**